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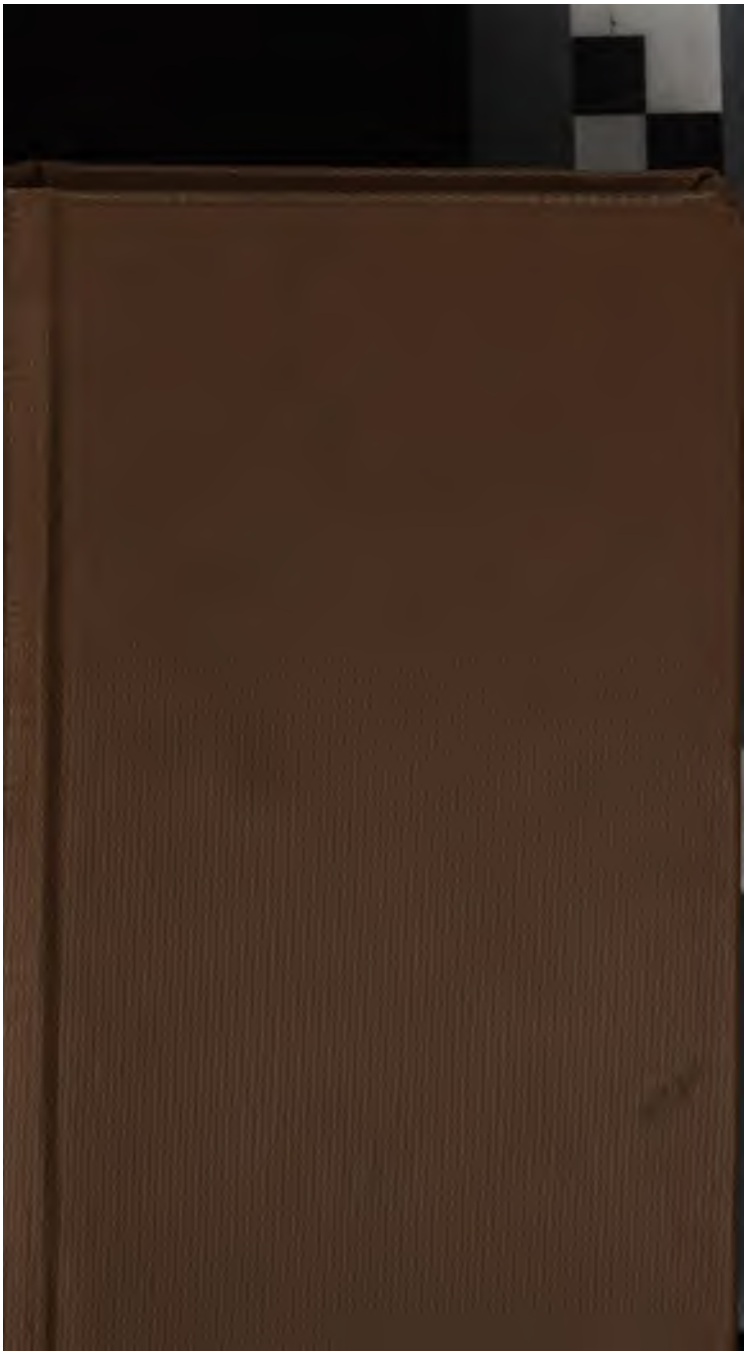
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THE

SACRED HISTORY

OF

THE WORLD,

ATTEMPTED TO BE

PHILOSOPHICALLY CONSIDERED,

IN A

SERIES OF LETTERS TO A SON.

BY SHARON TURNER, F.S.A. & R.A.S.L.,
Author of "The History of England," "The History of the Anglo-Saxons," &c. &c.

IN THREE VOLUMES.

VOL. III.

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PREFACE.

In presenting the concluding volume of the Sacred History of the World to the public, the author has only to thank his readers for their favourable reception of the preceding volumes, and to express his hope that the following pages may be deemed no unsuitable companion to them. They complete his views of the great subject which he desired to submit to the consideration of his younger contemporaries; and his wishes will be fulfilled, with much gratification to himself, if they shall be found useful to those whom he desires so much to assist or benefit.

Cottage, Winchmore Hill, Middlesex,
11th March, 1837.

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THE

SACRED HISTORY

OF

THE WORLD.

PART III.

LETTER I.

Recapitulation of the Objects of the former Letters.—Statement of the Subjects intended to be considered in the present Series, and of the manner in which they will be treated.

My dear Son,

It is now my wish to resume our consideration of the Sacred History of the World, in order to conclude our correspondence upon it, by adding those further views and thoughts on the topics not yet contemplated which will complete my original design, and bring the Divine economy of human life before you, as fully as I may be able to delineate it.

It was the object of the preceding letters to draw such general outlines of the natural structure and composition of our earth; of its solar and planetary associations; and of its vegetable and animal systems of living beings, as would enable you to perceive, from their most important laws and phenomena, the system of their Creator in their formation. It was also attempted to present to you some views of that scheme and course of things which he had devised, and has assigned to be attached to this human race in their earthly life. Considerations were added on his peculiar construction of our twofold nature, and on the results which, in this stage of its being, he *has effectuated in* it. The first state of man; *the change of his locality* from a special Paradise into

our common earth; and the cause and nature of the diluvian commotion and desolations, which ended the first-created state of our terrestrial surface, as well as of its then existing population, were laid before you with their connected circumstances in some detail. The new order and constitution of material things which were afterward established, and which have ever since been upheld, and under which we are now subsisting, terminated our proposed review of what it was expedient for us to recollect as to our external world.

Our attention was then more particularly directed to the state and history of mankind after their renewal. Their early separation into distinct nations and distant settlements was noticed. A general sketch was drawn of the most celebrated countries of the ancient world, and of some of the most striking features of their habits and circumstances. Their transactions were not further described; but we proceeded to remark on some of those peculiar occurrences which had accompanied the formation and fortunes of the Jewish people —a race of men with whose nation, and ancient history, and writings the well-being of all human kind has been inseparably connected; and by whose future destinies it is still likely to be most essentially affected. All these topics were remarked upon with an intention of tracing from them such indications of the Divine system in the creation and government both of material nature and of our human frame and living world, as were ascertainable in them.

As it was not my intention to compose a detailed historiography of the ancient world, the sketches which were drawn of the nations that were noticed were confined to those general outlines which served to illustrate the main purpose of the work, and with those the former letters ended. It is to the topics which were mentioned in the preface to the second volume, as those which it would be desirable to review, that your present attention will be called. They are all subjects of the Divine administration of human affairs, and form important sections of the sacred history of our world; they relate to the scheme and provisions which have been made for the diffusion and perpetuation of the human race, and for their continual and sufficient support, and to the employment of human industry thence arising. They comprise the Divine plans *for our social combinations* and constitution; for our civil arrangements and political relations; and for our mutual inter-

course both of amity and hostility. They will also lead us to trace the evolution and progress of our mental activities and improvements under the ordained system of our being, and the design and operation of this, with respect to our individual comfort, and for the general progression of human nature, as a favoured order of intellectual existence. Our task will be accomplished by an endeavour to glance, calmly and rationally, on those ulterior purposes of the Divine mind for which the system of our being has been so long upheld and carried on; and to the fulfilment of which mankind, in their various distributions, seem to be now advancing, with unequal step and in very diversified costume, but with an emulous acceleration in their most civilized societies which no prior age has been known to display.

These subjects will embrace all that it will be necessary to lay before you for the guidance of your forming mind in its endeavours to understand the Divine government of the world we are born to. But I do not wish you to overvalue what I may send you; I seek for truth; I desire to state nothing but what is such, and will not write a sentence which I do not believe to be right and proper. But neither you nor I must forget that I may err without intending it. What I send you will therefore still be, as before, only my individual impressions and deductions, grounded always, or meant to be so, on appropriate facts, and carefully reasoned from; but not possessing any other character, nor pretending to be to you or to any a deciding authority. They will be the phenomena of my personal conviction, and, as such, a series of intellectual conclusions, to be added to those which other minds have formed, and to be taken into your consideration with them when you are thinking upon this subject. It is in this way that moral truth enlarges its dominion in the human mind. New thoughts are suggested and published, which others deliberate upon and adopt, reject or modify, as seems to them most fitting. All lasting opinions and belief are but the continued acquiescence of the greater number of those who have considered them, and concur in believing them to be just.

Individual conviction, as it accumulates in such spontaneous coincidence, seems to be the foundation on which our established truths permanently rest. But this can never be forced. It must be freely given to be enduring; it is always personal and peculiar; and is the result, in every one, of thoughts,

feelings, inclinations, and circumstances, which do not e
meet in any other. These variations make concurrence
difficult and uncertain—but what is true at last gradual
tains it—and the admitted fact or conclusion then beco
fixture in human knowledge.

To produce this individual conviction in favour of hi
views and sentiments, every writer may justly aim; but,
same time, be content with seeking to gain it by fair reas
and correct statements, and never exact it, nor be dissat
or acrimonious towards those who may withhold it. E
us claims the liberty of judging for himself, without blar
to the ideas of others, and must, in common equity, co
to them the same right of deciding on what he may ex
What we retain in our own bosom remains of course ou
cluded property; but the very act of uttering it to others
veys a right to all who hear to admit or question it as
may deem proper. We have no title to command thei
quiescence in any human speculations, or to resent
doubt or disapprobation. With these sentiments the pr
letters will be written and submitted to you; never mea
be imperious—never claiming infallibility. If the lang
seem at times positive, do not mistake that as intended
assuming or dictatorial. It is to be read as only expre
the strength of my individual conviction, and not as a
suming assertion that my conclusions must be right, no
reproach to any who may differ from me. It would be
principled in me to write them if I did not believe them
just; but my belief is a law to no one else; and wha
phrases may be used, it will be always with the understa
that they leave every one to the fair exertion of his own
ural right to dissent or agree, as his own judgment ma
termine, without any fetter or imputation whatever. I
ask you to receive my thoughts as not unwelcome visit
to read them fairly as well as freely; to examine and
on them without prepossession, and with so much deliber
as their important subjects may reasonably claim. Searc
obtain elsewhere what further knowledge or other views
feel to be necessary for your final judgment upon them; l
to the remarks of those whose opinions you respect or w
you wish to consult, and then decide disinterestedly for
self. By this course I shall not be a cause of leading
into error, and you will be taking the fittest human mea
avoid it.

LETTER II.

That our World has been made and is conducted on an intelligent Plan, and for intelligent Purposes, which we have the Capacity to discover and understand.

My dear Son,

Our correspondence has been founded on the great principle that our earth and all its systems of living beings have been the creation of an intelligent Creator.

By that degree of intelligence which human nature possesses and everywhere exercises, we know what intelligence is in any being, and how it acts; and we can understand and appreciate what we perceive it to perform.

In human workmanship, we see the operation of intelligent beings with our rate of intelligence; and what we do as such assists us to discern and judge of the agency and effect of greater intelligence elsewhere. In the world we inhabit, we behold the works of intellect in its most perfect nature. But amid all its grandeur and inexpressible superiority in the productions which surround us, it still displays itself with so many resemblances and analogies to the qualities and operations of the mind which it has conferred upon man, that the agency of the Divine intelligence is never beyond our perception, and will always be a rational subject of our study. The success of the human intellect, in tracing it in its sublime arrangements of our material system, warrants the hope that the moral economy of our world may be in time discerned and developed, in all its wisdom and beauty, if we accustom ourselves to meditate upon it, and persevere in the belief that it has been devised and established by the same intelligence which has framed and governs the laws and principles of the visible creation.

It is the nature of intelligence to devise before it makes, and to make according to its design. Hence, in our natural world, every part must have been put together according to the purposes of its producer's mind.

Its construction has been framed to execute those purposes

in their intended order and succession; and it follows fro this, that all things which earth contains have been special adjusted to effectuate the ends appointed at their creatior because, without a specific adjustment of their due mea and causes, no specific effect can be educed—no end can b attained.

These principles apply as much to our moral as to our m terial world; for, if external nature has been formed upon reasoned plan, we may be sure that what concerns life an sensibility must have been as intelligently arranged by a intelligent Creator, and with still greater precision and cor trivance, if anything less than accuracy could be anywhere i the works of such a being, because, in addition to exactnes of frame and careful adaptation to coexisting things, it woul be necessary so to plan and adjust them as to suit the activ ities of the human mind, and not to agonize its sensibility.

A surprising degree of care and thought must have bee exerted to make such diversified forms of living things a everywhere abound, and yet to cause the existence of each t be so comfortable to them, and the comforts of all to be a harmonized as we find them universally to be.

If animal life required a well-conceived plan for its du subsistence and welfare, we cannot doubt that human natur has been the subject of a design as deliberate and kind; an if so, human affairs must have been arranged and provide for, and be always conducted upon a sagacious and well-ad justed plan, and for purposes worthy of the intelligence o a Creator, whose almightiness gave him perfect power an liberty to devise and execute whatever he thought proper We act in this manner ourselves, with our inferior intellect In all human workmanships and undertakings, we observ and use ourselves invariably forethought; plan; adjuste arrangement, and provided means to execute the design; a rational and attainable end in view; and a chosen process o operation to effect what is intended.

Plan and purpose, and a suited series of operations con formable to these, and successively conducing to promote and accomplish their prospective objects, accompany all hu man fabrications and pursuits; and for the plain reason that the end desired cannot be attained without them.

Such are our cotton-mills and steam-engines; such are *our military expeditions* and commercial enterprises; such

are our literary compositions; such are all the beneficial employments of our social life. Plan and purpose; directing mind; a selected process, or connected and adapted series of means and movements, and an end continually in view, and pursued until it be accomplished, characterize all the varied business and manufactures of human society. This being our perpetual, and natural, and unavoidable practice, we may be sure that omnipotent wisdom is not less sagacious, or less active and provident. We may therefore adopt it as one of our safest and most certain deductions, that plan and purpose accompany, in every part, the Divine economy of human life; and that the habitual course and sequences, the laws and agencies which affect or govern human affairs, have been arranged and are constantly regulated so as to realize in due order the Divine intentions, and to be always promoting and contributing to produce his ulterior determinations.

It is with these plans and purposes that the sacred history of our social world is more immediately concerned; for its chief aim will always be to discern and describe them. It is indeed a subject to which no individual is competent to do justice. From their very nature; from the greatness and remoteness to us of the omniscient Director; from the invisibility and intangibility of the agencies by which his guidance and ruling interferences are carried on; and by the very intellectuality of the process he is pursuing, and of its effects; the delineations and history of his administration of our world, and the investigation of the plans he is executing by it, and of the purposes which they accomplish, must have difficulties, and darknesses, and perplexities peculiar to their recondite nature, and very often insurmountable by any one.

On these themes no one must expect the same success as attended Sir Isaac Newton's study of the grand physical agencies which unite the sun and planets into a sublime fraternity with our globe. It was finely said of him, by one who wasted a genius of much promise and power by perverse applications of it;

> "Whose eye could Nature's darkest veil pervade,
> And, sunlike, *view the solitary* maid,
> *Pursue the wanderer through* her secret maze,
> *And o'er her labours dart* a noontide blaze."

But no brilliant result like this will yet reward our study
the moral and providential system by which human nat
and its operations, and concerns have been and continue
be regulated and carried on. Our attention has been, hit
to, too much directed to the perceptions of our mate
sense for our being yet able to explore, as we desire, w
lies beyond it. The Divine is always the superhuman ;
whatever is superhuman has been too much avoided and
cried by philosophical inquirers to be at present underst
as it ought to be. What is neglected is never much know
and what is little known is little valued, whatever its real
cellence may be. Hence, although what is beyond the re
of our eyesight exists as certainly and as perpetually as w
is within its compass, yet the science of the supernatural
been so depreciated and often contemned by those wh
power of thought and wide range of knowledge might h
thrown many rays of light upon its laws and operations,
we are still involved in as much ignorance and doubts conc
ing it as our ancestors under the Tudor reigns were of chyn
try and electricity, and of the greatest truths of anatomy and
tronomy. We know as little of the moral philosophy of
universe, and of the Divine plans concerning it, as they
of fluxions, galvanism, and [illegible]tation.

But there is no just reason that we should continue in
hostility or indifference to it. We have been made cap
of understanding it. The Deity has avowedly granted to
in our divinely-originating and heaven-destined soul, suc
participation of his moral and intellectual nature as to h
attached to it the noble possibility of being his image
likeness. We must never forget this dignifying benedict
By this he has himself characterized our created nature,
he has signified his desire that we should regain this per
tion ; he invites us to pursue it ; we are every year bec
ing more fit to do so, and it is not unreasonable to supp
that, the wiser we become, we shall more strongly feel
no inferior objects ought to prevent us from realizing s
sublime anticipations. There is a spirit abroad which
sires to elevate the condition of human nature. There
spreading impression that it is yet highly improvable. A
gression in it which we cannot stop steadily advances,
urges all into the invisible current. There is a generous
bition in many of raising both their own mind and the

to a nobler character, and of effecting this by increas-
moral influences upon the world. We may trace this
he professions and in the educated classes; and in the
g desire of educating and of being educated. The in-
ls are becoming more numerous and decided in all
s who feel that the union of knowledge, virtue, and re-
produces the most delightful and the most lasting en-
t of which the human mind is susceptible; and that
r most desirable, and will become our most valuable
ion. They seek to acquire this for themselves. They
end it to others. I read such effusions as these, to
n surprise, from the recollections of a very different
n my younger days, in our periodical works; and I
to find that such a new sunshine of British mind has
to illuminate our social horizon before the infirmities
and ailment have withdrawn me from it.

such aspirations and intentions are indications that hu-
ture has the capacity, as well as the desire, to compre-
d to appreciate its Maker's works and ways, and will
our to do so. Indeed, his past conduct towards us
ges us to hope that, in this path of study, the effort to
s mind and meaning will accord with his own wishes,
eive his favouring aid. He must desire to be known
uman race as fully and as extendingly as they become
d to do so. In all his communications to us, he has
us as if we were able to understand him. He repeat-
ls upon us to acquire a knowledge of him; and de-
hat one of the later perfections of our ulterior posterity
the enlarged and universal attainment of this intellect-
gression. On every occasion which has been recorded
velations, we perceive a rational and moral being, rea-
s such on his own wishes and meaning. In this char-
d manner he repeatedly addresses his human race as
hom he has enabled and considers to be, or who ought
d may be, rational and moral beings likewise. He
ideas from himself to us to become ideas in our mind,
were as capable of receiving them from him as from
r each other. He gives us commands to understand
as to obey. He pleads and expostulates with us, ex-
ntreats, counsels, urges, and persuades in the same
and by the same means, that is, by intelligible and
ted language, assuming frequently the phrases of the

most impressive eloquence and the most convincing ratiocination—as the finest intellects which we are acquainted with in human society endeavour to interest and influence our intellectual sympathies and faculties by such effusions.

The prophecies of Isaiah, delivered in his name, are splendid instances of such addresses. What, indeed, are all the discourses and lessons of that Great Instructer whom we most venerate, and by whom the human race has been most benefited, but so many communications and appeals from a Divine intelligence, breathing heavenly wisdom and goodness to creatures whom he had made to be intelligent, sensitive, and discerning likewise. He thinks and speaks like man talking to man, notwithstanding his exalted nature; and thus he manifests and acknowledges that degree of similitude between the human spirit and its Creator, in the intellectual capacity of our nature, which enables us, from what we experience in that, to understand and know him; to comprehend his meaning in all that he expresses; to imbibe whatever knowledge he pleases to impart, and to think and reason justly about it. It is unfortunately true, that every one does not avail himself of this Divine capacity, which he inherits as his birthright when he begins to breathe and live; but all possess it from their Creator, and may nurse and train it into activity and improvement if they choose, or shall be actuated to do so.

There cannot, therefore, be any reasonable doubt that we are able to comprehend and to discern those plans and purposes of our Creator in which we are concerned. Further than this, it is not necessary that we should be acquainted with them. But our external nature, our history and our current life should be viewed and studied with a constant recollection, with the perpetual impression, that Divine plans and purposes, specifically directed to them, preceded the beginning of all earthly things, and have been constantly regulating and accompanying them. From these all nature has originated; according to these every part has been created; and by these, in every age of our world, have its course and conduct been superintended and governed.

But all plans are proportioned and adapted to their intended objects and ends. There are always the greater and the smaller; the general and the particular; the subordinate ones, *and those which* command and actuate them. With the *mighty plan of* universal creation we have, in this stage

of our existence, no direct relation, nor with those of the starry orbs beyond our system. It is true that, as a part, however inconsiderable, of the wonderful whole, we must be in some respect affected by what affects that; and our astronomers have suggested that the innumerable hosts of radiant worlds above us have, besides their separate and peculiar laws and systems, some vast general movement, around some unknown centralization, in the depths of unfathomed space.

But no perceptible consequences flow from this to our human world or to its social constitution. Satisfied that other planets are governed by plans which, though essential to them, are not extended to us, beyond our general relations with them of distance, magnitude, and movement, our attention need never be turned towards any other schemes and designs than those which have operated on our nature and on our, to us while on it, most precious world; precious from its beauty and benefit to us, and probably not inferior, in the benefactions we receive from it, to the comforts and advantages in any of our sister planets. There is a glorious future promised to those who may be admitted to it; but as that will be a special kingdom, specially created for its immortalized inhabitants, it will probably be different from any that now exists. I cannot, therefore, avoid believing that we are as happy at present in our minor globe as our fellow-creatures are in the greater masses of Jupiter and Saturn. But be this as it may, our interests now are confined to our own earth, and to the plans and purposes on which that has been formed, and by which the economy of our social life is governed.

I am particularly anxious that you should feel and believe that creation must have been made in all its parts upon an intelligent plan, by its intelligent Creator, and should always study both material nature and human history with this fixed impression, because both will be more instructive and useful to you, as you read and think upon them with this pervading and guiding principle. You will then become more interested with them, and cannot otherwise properly and sufficiently understand either. Both will appear to you under very different lights, and present very different prospects, and excite very different thoughts and feelings, according as you cherish or omit, in your meditations, this enlightening and directing truth. It *will be an improving* exercise of your discerning faculties, *and a constant pleasure* to your best sensibilities, to *give them this employment.*

LETTER III.

On the Importance of Studying Nature and Human Life, with the belief that Divine Plans and Purposes have always accompanied them.

My dear Son,

If we adopt the principle that we are living in both a natural and a social system of things, which have been made on intelligent plans for intelligent purposes, we shall never theorize or think on either nature or life as if they were subsisting and moving without them, or could have originated in any other manner. Though we should be unable to trace them, yet the conviction that they are realities should never be absent from our minds; for as, when we can discern them, it will be our duty to reason conformably to them, so, when they baffle our present researches, we should still bear in mind that creation has nowhere existed without a reasoned design and a reasoning and directing government. If we follow the too common habit of thinking and acting upon the facts and laws of material nature and human life as if neither had been framed or was conducted on any intelligible plan, or for any rational and worthy purpose; as if all visible things were subsisting and recurring solely by themselves, and left to themselves without design or object, and with no invisible superintendence; if we regard the phenomena of nature, and the great events of history or of individual biography, as mere trains of unarranged, undirected, uncaused, or unconnected sequences, without any reason why they should be what they were, and succeed each other as they do, and without any assigned or connecting relation; destitute of all accompanying meaning, and occurring and changing by no rule or for any projected or pursued end:

If we thus estimate and regard the world we live in, and the course and state of things about us, we shall be perpetually misconceiving and misrepresenting them; we shall be narrowing and darkening our intellectual views, and shall keep away from our thoughts those truths which will most *expand and improve* them; which will ally them with grand *ideas and elevated* hopes; and, in every vicissitude that may

befall us, will always be a source of exhilaration and soothing comfort.*

I do not mean that we should be always painting or gilding our books of knowledge with religious vignettes or decorations for ornamental recommendations; nor edge our conversation or public discourses on art or science with such allusions for personal display or popular effect. It is not the phrase or the paragraph abstracted from the pervading mind and personal feeling which is valuable; for as these express no genuine conviction, they excite none. They are heard as rhetorical perorations, applauded, admired, and forgotten. The desirable requisite is, that these principles should be the silent and abiding, but ever-living impressions and belief in our own individual mind. We should feel that in examining or experimenting on any object or department of nature we are investigating the productions of an intelligent Creator, which have design in every part. This idea should accompany us also with habitual conviction, as we contemplate the maps of recorded time in their historical lineaments and national relations.

If we assume that, both in natural philosophy and civil history, we have before us the features and the outlines of the plans and purposes of the Former and Governor of all things, and are viewing in the observed and narrated results the evolutions and executions of his purposes, our knowledge will be kept in continual unison with him; and we shall then perceive meaning, wisdom, directing causation, connexions, relations, utilities, and accomplished ends, which are now but rarely adverted to or thought of.

That we know so little of them beyond our general and verbal acknowledgment is no proof that they are unknowable; but is rather the indication that they have not been a favourite study; for, in other pursuits, no failures prevent other exertions from being more successful. Nor is there a science now cultivated, except the geometrical ones, which

* When we read what philosophers abroad in our own times, and what some among ourselves, have started on the origin of things, we have reason to fear that, if the principle of an intelligent plan and correspondent creation be relinquished, we shall have our physiology deformed by absurdities as *striking as those* of Neocles, the Crotonian, whom *Herodotus of Heracleum narrates* to have maintained that women *in the moon lay eggs, and that the men* produced from them are five *times the size of those on our earth.*—Athen. Deipn., l. 2, p. 57.

was not, both in the days of Aristotle and of Tacitus, in the same barren and, apparently, unimprovable condition. Nature was then everywhere an undeciphered mystery; and it was because it seemed useless to study it that Socrates called the attention of the inquisitive to moral and political discussion.*

The error of thinking and reasoning on the world we inhabit, without these views, will appear, if we consider how egregiously the young sailor would mislead himself if, on entering a ship of the line, on the commencement of his professional career, he did not consider it as having been built by skilful persons, working with acquired dexterity, according to well-formed plans; and framing every part with judgment, care, meaning, and purpose. If, like some savages, he should deem the noble vessel a living creature, moving from and having life in itself; or that it was some monstrous bird, with immense limbs and wings; or but a self-formed or casual meeting and cohesion of wandering particles; or the gradual growth of a fallen tree or of a little canoe, by a slow enlargement during millions of ages, into its noble magnitude and stupendous complication: if he should surrender his mind to such fancies as these, and disbelieve that scientific directors and able shipwrights had framed it purposely, how contemptuously should we deride or pity his ignorance! Though entering it with a knowledge that it was to sail, and, if necessary, to be used for battle, he would suppose its masts, canvass, and cannon to be the instruments for these services, yet how useless and unmeaning, in his first ignorance, would seem most of the numerous articles of the magnificent structure! They would appear to his apprehension more like encumbrances and confusion than essential parts of its serviceable mechanism, until he had gradually found out their uses, and learned to know that everything he saw had been devised and made with specific purposes for specific ends, which, whenever wanted, they accomplished. Then he would understand that not a single rope or plank, not even

* If the sentiments of one of the seven sages had become universal, how little should we have known of the laws of the planetary worlds. Bion said that astronomers were most ridiculous persons (γελοιοτατους), for though they could not see the fish near the shores they were walking by, they pretended to be able to know the things that were in the skies.—Stobæus, p. 495.

one peg or nail, had been put in unnecessarily, or without direct meaning, foreseeing intention, and sufficient reason. It is the same in the structure of nature and in the economy of life. Meaning, plan, purpose, and efficient execution everywhere pervade them.

As I do not desire you to believe this because I assert it, I will state to you the grounds on which I rest my own conviction of it; because, if your belief can be associated with your satisfied reason, it will always be the more intellectual and influential.

Nature, as a creation, can only be what the Deity has made it to be; and it is what it is, solely because he has chosen so to frame and to continue it. He therefore intended to make it what we perceive that it is, because it is not possible for any one to make without intending to do so. But making equally implies previous devising and purpose, and a particular design and purpose; for anything made might have been differently made, or not made at all. To be what it is, instead of being anything else, it must therefore have been specially designed to be such, and that design must have been specially and accurately executed. But all special designs consist of plan and purpose, and, if executed, the execution is the representation—the realization of these in some perceptible form.

It is of essential importance to us that our sentiments on this great subject should be correctly and early formed; for you will find that they will very much influence and colour your after life and mind. It is in the first part of our worldly career that we have most leisure to think, and, by education, are led to meditation and inquiry; we are then also most able and disposed to think and judge fairly. Right opinions are the elements of all true wisdom, and even of moral conduct. Rectitude of mind and rectitude of action have a personal relation to each other, which is not easily shaken. Be right, therefore, in your conceptions and knowledge of your Creator, as soon as you can, that your mind may be settled on its proper basis and station for the remainder of your life.*

* There is a passage in Mr. H. Taylor's "Statesman" on the connexion between virtue and wisdom that deserves a place in your memory—

"If there be in the character not only sense and soundness, but also virtue of a high order, then, however little appearance there may be of talent, a certain portion of wisdom may be relied upon almost implicitly.

"For the correspondences of goodness and wisdom are manifold; and that they will accompany each other is to be inferred, not only because

LETTER IV.

The Plans of the Creator are adapted to the different Classes of Things of which our World is composed.—The distinction of these into material Substances, moving Powers, and living Beings.—The Plans as to the Human Race different from those of the Rest of Nature.

My dear Son,

In considering the Divine plans as to our world, it is important to observe the different classes of things which it comprises, as each of these must have a design and a system correspondent with their nature, and adapted to maintain and continue it. It will be sufficient to sketch the outline of these in the most general manner, as it is only with one department of them that our present correspondence is particularly concerned.

Our world may be viewed as consisting of three general classes of things, very dissimilar to each other, which we may distinguish by the terms material substances, motive powers, and living principles or beings. Each of these has its peculiar laws, each has been formed upon a distinct plan, and each is used for purposes which only its own class can effectuate.

To the latter, of course, the human race belong. But we will glance slightly on the others, as we are always connected with them; and although each has its own appropriated plan, yet they are all parts of the great stupendous whole, which our compartment of the universe comprises, and are therefore subordinated to that grander plan by which every member of our system is constantly regulated.

Matter is motionless in itself until moved by a motive

men's wisdom makes them good, but also because their goodness makes them wise.

"Although simple goodness does not imply every sort of wisdom, it unerringly implies some essential conditions of wisdom. It implies a negative on folly, and an exercised judgment within such limits as nature shall have presented to the capacity.

"*Where virtue* and extent of capacity are combined, there is implied *the highest wisdom*; being that which includes the worldly wisdom *with the spiritual*."—Taylor's "The Statesman."

power additional and extrinsic to it. Of the motive powers which affect and regulate the material substances of nature, we know but little. We have attached various names to what we have remarked. We call them respectively attraction, gravitation, impulse, cohesion, affinities, magnetism, electricity, caloric, crystallization, polarization, and by some other denominations, all very useful in discriminating their phenomena, but explaining nothing of their nature.

These three great classes of subsisting things are probably everywhere in the universe; at least they so completely form the character of our world, that we can hardly conceive any other to be without them. Life, motion, and matter seem to us indispensable to all created orbs of beings.

Motion has been thought by some to be inherent in matter; but this is very much like supposing that two very dissimilar things, each independent of the other, are yet one and the same thing. It will be therefore more accurate to keep them apart, and to consider the motive powers as a distinct class in nature, of their own kind, though always combinable and usually combined with the two other orders we have specified—material substances and living beings. All the three are in frequent union together; but always separable, and frequently separating from each other. Each can be, and at times is, in the distinct and independent state, but always capable of resuming its connected condition. We see them about us perpetually in all these modes of subsistence.

The earth and stones we handle are material substances without life or motion; clouds are material particles united with some of the moving agencies. Trees, animals, and mankind are living beings, conjoined with material forms, and also with some of nature's motive energies. Within our system we likewise continually behold the phenomena of moving powers, without the addition of either life or matter, as well as in constant association with them. Light, heat, storm, and the electric fluid, whether as lightning or as magnetism, or in its other modifications, are familiar instances of subsisting realities, which we allow to be distinct from any living agency and from the material particles which they so strongly act upon.

The most splendid instances of moving powers, distinct as well from life *as from the matter* which they actuate, and *operating in their own way*, and according to their own laws

and nature, appear to us in the diurnal revolution of our earth, and in its annual, or rather continual, circuit with the other planets around our central sun. We perceive them also in the, at present, inexplicable visits of the cometary travellers. Some marvellous motive powers, two at least, the impelling and the gravitating, actuate each of these. Their movements are cognizable by our senses; and it is the glory of human nature, by its persevering observations and intense thinking, to have descried and described the laws of their motivity. But with the nature of the moving power, notwithstanding all the penetrating energy of our science, we are absolutely unacquainted. For impulse, expansion, attraction, gravitation, projectile force, and such like terms, are but words by which we ticket and catalogue the facts we so discriminate. They disclose no knowledge to us of the essential nature of the powers which they signalize. We use them as appropriated words, fully intelligible to others so far as they mark the phenomena they allude to; but they always denote unknown qualities or agencies, and do not impart any elucidating knowledge of what that reality is, whose effects our mathematicians and philosophers so correctly state, and have reasoned upon with such surprising sagacity. To them, for what they have done and are doing, we cannot be too grateful, or estimate too highly the intellectual ability which they display. I appreciate it so much, that it is quite sufficient to prove to me that the living principle in human nature has an independent thinking property, which ought never to be confounded with either motion or matter, or even with the other living principles that coexist with us on our terrestrial surface.

In our solid globe, if it be a compact series of masses, or in the solid rocks and strata which compose the globular superfices on which we walk and act, whatever be beneath them, our Creator has made and placed the compounded masses, which he designed should be permanent without either life or motion, in such order and shapes, and with such several compositions of substance, as his plan for its construction required.

With equal care and selecting power he has united the *living* principles which he has assigned to our earth with *such diversified* but specific and continued organic forms, as *also suited his* chosen designs, and which give to each that

duration, and those enjoyments and sensations of conscious life, and that reproducing power, which he had determined they should respectively experience and possess. The motive powers which he has commanded to attend our globe, and to be associated with its diversified compartments, were selected by him, and were added to our world by the same judging skill with which everything connected with it has been made. Their force and energy peculiarly need plan and government; we may therefore be sure that their quantity, force, modifications, continuity, positions, and laws, and course of movement, have been all, with careful skill, previously adjusted and apportioned to the rest of nature, and to the effects they were to produce; and that they all act in execution of the great plan, and are strictly regulated and guided to do so, and are restrained from any other results.*

When the material substances and the moving powers were produced, and their arrangements and laws established, and the course of nature under their operation was settled and put in action, the design of the Creator in their formation was so far completed. The system and habits of the living organizations of nature being also intended not to vary in their several kinds, but to be always uniform in their various reproductions, the scheme as to them may be presumed to have been accomplished by their formation, and by the laws of their existence being so made as to limit them to be always and only what they are. Hence the different species of vegetables and animals are in all ages and countries substantially alike. The lion in our Zoological Gardens resembles the lion that appeared in the amphitheatres of Rome 1800 years ago; corn is still what it was in the days of the Pharaohs; and the trees of our present forests are not dissimilar to those which sheltered our Anglo-Saxon ancestors.

* The periodical returns of the comets seem to me to show to us with what commanding and adjusted regularity the tremendous moving forces of nature are governed by a directing intelligence. Such limited recurrences indicate a settled plan of an amazing extent, considering the space it must embrace. I do not know whether you are aware that Sir Isaac Newton, who died in 1727, is stated by Whiston to have predicted the appearance of the comet of 1736. "As far as we know, he is the very *first* man, and this is the very *first* instance where the return of a comet has *been predicted beforehand*, and has actually come *according to that prediction*."—Whiston's Astr. Year.

But the human race is that order of living beings which has been created upon a different plan; and it is this appointed difference which separates us from all other animals. Our bodies indeed are, like theirs, made upon an abiding system as to their external form and interior functions. Ever since the deluge, the human figure, in its material structure and with its organizations, has never essentially varied. Colour and other accidents of the corporeal frame may vary, because many natural causes affect our skin and exterior appearance; but the internal likeness is uniform and universal. It is in our moral and intellectual natures, and in their changes, enlargements, sensibilities, powers, improvabilities, and destinations, that our dissimilitude to every other kind of living creatures particularly displays itself; and from these the sacred history of our species, and those branches of it which these letters will treat of, take their rise, and with these are perpetually connected. To the sacred history of man all the other classes of subsisting things on our earth are subordinate. In this the plan of the Creator as to our world seems to centre; and for the completion of his designs, with respect to the ulterior state of his human race, the present course of nature in our system may be supposed to be carried on.

LETTER V.

The Invisible Agencies as certain as the Material ones, both in Life and Nature.—The Divine Agencies are of this Character.—Change of the Divine Plan as to Human Population after the Deluge, and in the abbreviation of Life.

My dear Son,

In the preceding remarks on the Divine creations I have directed your attention to human operations and fabrications, because they will give to your ideas on this mighty subject the most sensible and experimental realities to refer to and to rest upon. Nothing on earth so approaches the *modus operandi*, the forming agency by which the Deity has constructed and regulates all things, as human workmanship and govern-

ment. Mind acts in us as it appears to have acted in him; thinking in us resembles thinking in him; our manner of willing represents to us the nature of his volition; and by what we contrive and do in the use of our intellectual powers, we may conceive how his sublime spirit has designed, and how he executes his designs. We can, in the same manner, infer and perceive what is direction, guidance, and government in him, by our own acts of this description. Even the invisibilities of his interferences and administrations are made intelligible to us by our own. For the orders of our cabinets to their distant governors, as those of the imperial general to his marshals and officers, act by invisible impulses and motivities. Their ears hear the sound of words, or their eyes may trace the letters of the written despatch; but the effect of both, the influence, the power, the actuating cause which produces their immediate and exact obedience, is entirely intellectual and invisible.

It is the mind of the director, though hundreds or thousands of miles distant, which moves the mind of the directed and the obeying. Neither sees the other, nor the ruling impulse which the one transmits and the other receives and conforms to. The process is one of the invisible intellectualities which the human faculties can put in action, and be conscious of and governed by.

Of this kind were the plans of Napoleon and Wellington in their several campaigns; unseen by any, intangible by themselves. They were ideal realities, putting in action all the material substances of cannon and warlike munitions; all the projectile forces and moving powers of their instruments of battle, and all the living principles, both in animals and men, which they ordered to move and act, correspondently with their determined plans, to execute their determined purposes. The precisely-operating and unresisted power and motive influence by which the natural qualities and spontaneous wills of their armies and implements of warfare were put into action, and controlled and regulated into the specific actions which were intended, and which were made to achieve the devised and appointed ends of the commanders, were nothing like objects of sight and contact. It was as invisible and as intellectual as that Divine agency which guides and influences *material nature* and its moving powers; and which, in the

same unseen manner, conducts its economy of human life, and all its particular interferences.

Our legislation is another instance of invisible, moral, and intellectual agency upon us, of the strongest and most commanding effect, by which our actions are continually governed. We see not the legal or political force which we obey. We behold only the instruments which execute it, or the printed words which relate to it. But the agency, which, if we resist, will put the whole society into operation against us, is an ideal reality, existing in no particular place, confined to no station, yet pervading, superintending, and ruling the whole community in which we reside.

What thus occurs between man and man will serve to illustrate what is always taking place between us and God. His presence is everywhere in effect; his plans guide, his mind actuates, his will governs all things; his purposes limit and shape the course and results of all that he puts into movement; and yet all this agency, even in its most formidable impulses, as well as in its gentlest attraction, can be neither seen, nor touched, nor subjected to any examination of our material sense.

It is as invisible and as wholly intellectual as the effect, on our sensibility and rational spirit, of the departed poet, orator, or historian. We read words which of themselves are but marks or scrawls, blackening the paper they are upon. It is the unseen genius of the writers which affects our mind through these, its petty instruments. It is invisible mind addressing invisible mind. The process and the operation are ideal, and by our organized senses imperceptible. The recollection of these, and of all effects analogous to these, will enable us to form a rational and comprehensible notion of the nature, mode of operation, and continual efficiency of the Divine agency, which guides and governs us, and which is continually executing the plans and purposes that have been determined on as to the economy of our human life. But while we use these illustrations, it is for us to bear continually in mind, that however assimilating such things be in the point of view in which they are here represented, yet all that is Divine rises above what is human with that immeasurable superiority which infinitude, and perfection, and eternity unceasingly confer.

In considering the plans and purposes of the Deity, we *must make this* distinction between them, that although

are what must be our inferences concerning them, yet the latter will be always less to us than the former. The plan is devised to execute the purpose, and is continually displaying itself in the process of the execution. But the purpose is rarely discernible until it has been accomplished; and is, even then, often a subject of difficult deduction; neither is written in the heavens, as none of the laws or agencies of nature are. Nothing but what is material is a subject of our senses; everything else is a perception or inference of our understanding, but it is not less certain. What, indeed, is sensation itself but an intellectual consciousness? It differs only in its cause; we feel the effect, but from that alone do not know the cause. We use our understanding to perceive by what the interior emotion has been produced, and we ascribe it to one external object rather than to another by the decision of our judgment. We discern by this the real exterior thing which has affected us. This is an inference of our judgment, and thus our knowledge of natural and visible, as well as of intellectual and invisible things, always arises from the perceptions and inferences of our mental faculty. We are right in our opinions when our intellectual inferences are right; and not more so in our sensations than in our reflections and reasonings. It is the character of our knowledge in all things to be the inferences and judgment of our intellect. If you speak to me, it is this reasoning and judgment, trained by former experience, which lead me to conclude that the voice comes from you, and not from the chair or table; or when I hear the robin sing, that it issues from the bird instead of the tree he sits upon.

Our inferences as to plans and purposes are as much true knowledge and certainties as those we derive from our senses; in either case are they such, unless justly made. In both, we must learn to observe accurately, reason properly, and judge soundly. The conclusion, then, becomes a positive truth; as surely in what we can perceive only by the intellect as in what we behold and handle. We are frequently erring in our decisions on the experience of our senses, and still oftener differ from others in the information they convey. Sense is, therefore, not a more certain guide to truth than sound intellect, for it is this which is our real teacher and *director in everything* we know.

On this reasoning, the invisibilities of our world and of the

universe, where they are in existence, and become de
and are rightly inferred and stated by our investigating
are as certain and as true to us as every material thing
we hear and look at. It is not the bodily organ, but the
which, in our sensorial impressions, perceives, feels, l
compares, judges, and knows. The nervous organizat
but an optical tube which it uses in sight; or an acous
strument, which collects for it the vibrations of the son
fluid when it hears; or the numerous implements into
it converts its fingers when it handles and operates by
agency. It is our intellectual principle which, in all the e
that we call sensations, is the acting, feeling, moving, pe
ing, and knowing power. The invisible things of natu
thus as cognizable by us as the visible, though not so sc
readily. They require a cultivated mind, exercised on
subjects in proportion to their difficulty and remoteness
this is necessary in all our recondite studies.

The more you observe the statements and argumer
those who exclude a Deity from nature and disbelieve a
ation, the more useful you will find it to be to recollec
apply the ideas here suggested. These writers are stre
to banish from the mind whatever their senses cannc
amine, on the fallacious theory that nothing else is exis

On the topics which we will proceed to consider, we
first collect from history and nature the main facts
mark the plan and system of our Creator with respect t
subjects of our inquiry, and trace such laws and prin
concerning them as we may be able to discern; and th
tempt to infer the purposes for which they have been
lished.

The POPULATION of our world will naturally be the firs
ject of our attention, as it is the basis and material of a
other subjects. The circumstances which have actually
place enable us to notice the outlines of the plan which
prehended them.

Intending at some period of his eternity to have a h
race in his universe, the Deity chose to make our terre
globe for their present residence, and to place this, wit
associated planets, under the influence of a central su
that compartment of unbounded space which our syste
cupies. In what portion of the wonderful whole we are
ated, we know not, and have no means of ascertaining.

numerable bodies effuse radiances of light above and about us, which induce us to consider them to be material suns, inhabited by living beings. The analogy is persuasive and satisfactory; but our opinions about them can only be speculations, as we have nothing but the lucid similarity to reason from; and comets possess their degree of this quality, and yet are so unsubstantial, that the stars they cover can be seen through the centralized nucleus of several which have entered our planetary area. We know not whether we are gliding in the middle of a living universe or in a corner; or whether our population is or is not the chief, or the only intelligent beings which our solar system contains. It is most probable that we are not the exclusive vitalities which have a Divine intellect as their distinguishing property; but it is not certain. We have not the least information whither our departing spirit is removed to, or whether Venus, Mars, and the Moon, whose material masses seem most to resemble our own, receive it as their inhabitant, or have original populations of their own. In the absence of all solid grounds of judgment, conjecture would be misleading, and it is better to leave the question in its natural uncertainty. The safest fancy would be to suppose that each has a peculiar population suited to it, and therefore not so suited to any other. This must be as much the case with ourselves as with them; only, as the operation of death manifestly and universally takes us away, our living principles, which mere separation from the body cannot destroy, must go somewhere. The ancient Christian fathers disposed of our disimbodied souls by conveying them into the central regions of our earth; but as our present geologists make that a red hot, or molten mass of fiery matter, any other location of them, while that hypothesis lasts, will be a preferable supposition.

Our Creator began mankind by the pair whom he placed a while in Paradise; but on their determination to do what pleased themselves instead of obeying him, he transferred them to the general surface. On this their posterity multiplied, and continued the disobedience, until the increasing perversity disordered their social communities with universal corruption and violence. This state was so much at variance with his wishes, and with his purposes in their existence, as to make it necessary, in his consideration, and according to his plans for this order of his living beings, that they should

all be removed at once and together, instead of dying off, as they would otherwise have done, gradually and successively, while a young race was rising up among them. The overwhelming deluge we formerly considered executed this ordainment on all but that single family, who were preserved to begin a new series of population of the earth, with laws and under circumstances very different from the anteceding ones. The sudden removal of all but this favoured fragment allowed the first generations to grow up without the deteriorations they would have imbibed from the degeneracy of their predecessors. Their future errors and transgressions would, by this plan and its execution, originate from themselves, as they would have their immediate parents only before them for their educating models, and these had been selected for preservation because they were the children of a moralized and pious father.

That the renewed population might not become the same kind of evil beings as that which had been taken away by the simultaneous death, He placed it and all earthly nature under new laws and circumstances, by which human society, ever since, has been materially affected. He produced a new surface on the earth, from the dissolution, fractures, dislocations, torrents, subsidencies, and devastations of the old one; burying, amid the convulsions and changes of both land and waters, which accompanied the tremendous yet governed catastrophe, vast portions of ancient vegetation and of animal races; most of these being suited to the preceding state of things, and not continued into the present one, of which they were less fitting. He abridged, also, the life of man to one tenth or twelfth of its anterior duration—an alteration which made a recurrence of the former state of human society impossible, and which has caused it to contain a very different species of human creatures from the antediluvian race.

Our present population thus began under new laws of life and death, and on the principle thereby of being a succession of shortlived generations. The former plan, of a continuous individual for eight or nine hundred years' duration, had been tried, until it had prevailed so long as to prove to their posterity that the first stages of a human being's existence were not able to receive such a lengthened vitality beneficially to *themselves.*

Every day that I look around me, or peruse the annals of

history, I feel the wisdom and the necessity of this change. I assure you that I cannot conscientiously say of any individuals that have figured on the human world, that it would have been advantageous, either to themselves or to the community, that they should have the longevity of a Methuselah; nor could any be yet endured in such a protracted existence on our earth, unless their wisdom and their virtue, their intellectual attainments and their practical use of them; their self-government, humility, gentleness, and philanthropy improved and enlarged as their years were multiplied. But how very rare is it to find any one who lives on the habitual principles of continual self-melioration, self-regulation, benevolent feelings, and attentions to others, mental acquisitions and enlargement, with adequate duty, gratitude, and love to his perpetual benefactor! The common experience is, that most attain improvements to a certain extent, but advance no farther. Self-indulgence then takes the lead, and becomes the law and habit. To enjoy life for its gratifications, and to be satisfied with themselves as they are, is the general character and practice; and from that time they remain either stationary in their moral and intellectual personality, or they deteriorate. Certainly the lengthening of life does not so commonly increase the good qualities or utilities of the individual, or preclude or remove his unpleasing or injurious ones, as to incline us to believe that it would be any benefit to society to extend our present existence beyond that fourscore or one hundred years, to which, in its greatest protraction, it is generally confined. It appears at least to be incompatible with a succession of young generations, wanting all that the older possess; with a series of extending populations, spreading and multiplying everywhere, and with that progression of human nature which has hitherto proceeded more from new races that have sprung up than from the stems they have emerged from. It is enlightening to our understanding that the system of great longevity was tried; but it has been an advantage to human happiness, and to the gradual improvement of human nature, that it was not continued. Indeed, if I had the power of immortalizing my contemporaries and myself at this moment on our present earth, I would not do it. I like, and esteem, and admire them very much, on the whole, as they are; but as I wish both them and myself to be much better than we are, I would not give an

eternity to our social world, in its present character and condition; for that would be an eternal perpetuation of failings, errors, vices, ignorance, defective judgment, violent prejudices, wrong habits, and much obliquity of acting mind and personal temper, all of which I should rejoice to see absent both from myself and my coexisting fellow-creatures, and which, I believe, will diminish in our succeeding generations. At present, it is certainly best that such an extremely small number reach or pass beyond a century in the state in which human nature appears in our present world. What human violence can do and will do, we see in the regions where the lawless and the bandit prevail, and in the cities and countries where persecutions or reigns of terror are established. What human corruption can sink to is too disgusting to be described or thought of. The cessation of antediluvian longevity lessens the duration and the evils, and intercepts the progress of both these calamities.

Let us now contemplate the scheme and laws of our population which have been established, and endeavour to ascertain those which are really operating, and avoid the misconceptions of them which have erroneously been circulated.

LETTER VI.

Statement of the Theory of Mr. Malthus on Population.—Observations upon it.—Mr. Sadler's contrary Views.

My dear Son,

Near the beginning of the present century, Mr. Malthus excited a great sensation in the public mind by suggesting, and afterward by more elaborately maintaining, an idea not wholly new, but, though surmised by others, very little attended to before, on the subject of human population.* This

* "The existence of this principle was first remarked by political economists in the concluding half of the last century; and allusions to it may be found in the writings of Wallace, Hume, Franklin, Smith, and particularly of Mr. Townsend."—Bishop J. B. Summer's "Records of *Creation*," vol. ii., p. 102. To these names may be added that of Arthur *Young*.

"the constant tendency in all animated life to increase *nd* the nourishment *prepared* for it."* In his work on ulation he proposed, as the first point of "our inquiry cerning the improvement of society, to investigate the ses which have hitherto impeded the progress of mankind ards happiness."† He represented this supposed tendency e one of the chief of those causes which obstruct human ity, and as a cause combined with our nature, and always ng strongly on society,‡ but acting so unfortunately as to asion very largely the evils we most lament.◊ He pro-nced unequivocally this tendency to be a perpetual ten-cy to increase our population in a geometrical ratio, or to ble in every twenty-five years,‖ while the means of our sub-ence were strictly limited to an arithmetical augmentation ¶ The consequence of this surprising difference, thus ged to be established in nature between the rates at which numbers and our food respectively multiply, becomes, on own statement, frightfully appalling. In three centuries food will not suffice for a three-hundredth part of the pop-ion to which, according to these pretended laws, the nan race would, in that space, at any period or region of world, amount.** On this hypothesis it would have been

Malthus's "Essay on the Principle of Population," 4th ed., vol. i., It was first published in 1798, suggested by a paper in Mr. God-'s Inquirer.—Ib., preface.

Malth., p. 1.

"The principal object of the present essay is to examine the effect of great cause intimately united with the very nature of man, which been constantly and powerfully operating since the commencement ociety," p. 2. "The cause to which I allude is the constant tenden-n all animated life to increase beyond the nourishment prepared for —Ib.

"The natural and necessary effects have been almost totally over-ked; though probably among these effects may be reckoned a very siderable proportion of that vice and misery, and of that unequal ribution of the bounties of nature, which it has been the unceasing rt of the enlightened philanthropist in all ages to correct."—Malth., p. 2.

"It may safely be pronounced, therefore, that population, when hecked, goes on doubling every 25 years, or increases in a *geometri-retio*," p. 8. "A thousand millions are *just as easily* doubled every ears by the power of population as 1,000."—Malthus, ib., p. 8.

"It may fairly be pronounced, therefore, that, considering the present rage of the earth, the means of subsistence, under circumstances the st favourable to human industry, *could not possibly* be made to in-se faster than an *arithmetical* ratio."—Malth., p. 12.

"Supposing the present population equal to one thousand millions,

impossible for mankind to last even 200 years from their beginning, unless destructive checks were at all times extirpating it, at a rate so rapid and so enormous as to allow only 1 person to be alive out of every 4,096, who, if the course of nature should be left unrepressed, were certain to be born in 300 years.

But even this incomprehensible disproportion and devastation, which are calculated on the assumed doubling in every twenty-five years, do not express the full operation of these fatal laws of reproducing nature, as Mr. Malthus interprets them; for he declares that population has doubled itself in fifteen years;* and not perceiving the physical impossibility of such a multiplication, he has allowed himself to imagine that a still greater augmentation might accrue,† if Indians and uncleared ground were not to interfere with it;‡ not observing that, to enable any population so to double themselves every fifteen years or less, infants and children must become parents.§

The mind startles at statements like these, so extraordinary in themselves, and so melancholy in their results; and with perplexing wonder would reasonably ask, "Can such things be?" They are so incongruous with the science and beauty of the natural creation in other respects, that they would seem certain of provoking immediate disbelief; but they were put with so much ingenuity, and their novelty was so striking that they obtained the assent of many able and excellent men

the human species would increase as the numbers 1, 2, 4, 8, 16, 32, 64 128, 256; and subsistence as 1, 2, 3, 4, 5, 6, 7, 8, 9.

"In two centuries the population would be to the means of subsistence as 256 to 9; in three centuries, as 4,096 to 13; and in 2,000 years the difference would be almost incalculable."—Malth., p. 13.

* "In the back settlements, where the sole employment is agriculture and vicious customs and unwholesome occupations are little known the population has been found to double itself in fifteen years."—Malth. vol. i., p. 7.

† "Even this extraordinary rate of increase *is probably short* of the utmost power of population."—Ib.

‡ "Very severe labour is requisite to clear a fresh country; such situations are not, in general, considered as particularly healthy, and the inhabitants are probably occasionally subject to the incursions of the Indians, which may destroy some lives, or, at any rate, diminish the fruits of their industry."—Ib.

§ In blindness to the personal impossibility, it seems that another able man has gone rather greater lengths in his conjecture. "Sir William Petty supposes a doubling possible in so short a time as ten years."—Pol. Ar., p. 14. Malth., p. 7.

who, looking only at his arguments and instances, taking these for granted, and not searching beyond them with an enlarged and impartial investigation for themselves, too hastily admitted his principles to be true. They endeavoured, with high and laudable purposes, to show that they were even wise in their design and beneficial in their operation ;* others, taking a different view of their effects, espoused them with a very contrary spirit; and their general effect has been unfavourable to our philanthropic sympathies for the larger mass, of which every community consists.

The prospects to society presented by these tenets were little else than increasing and unrelievable wretchedness and deprevation to every future generation; unless mankind desisted from subsequent reproduction, or unless a portion only were allowed by the great majority of the rest to be the sole parents of every community—a portion which the geometrical law would be every year requiring to be made smaller. Policy and benevolence might ponder in vain for any other remedy.

The author unhesitatingly assured us that this overwhelming tendency of population to outrun its producible food in this formidable disproportion could be counteracted only by adequate checks, preventive or positive. These checks were acknowledged to be those of vice and misery, unless mankind would impose upon themselves, perseveringly, the moral restraint of abstaining from the connubial association.† But even this abstinence, if submitted to, Mr. Malthus allowed would also produce vice, while it would be murmured at as an evil by those who were compelled to practice it.‡ Mel-

* Summer's "Records of the Creation," part. ii., ch. 5 and 6.

† "On examining these obstacles to the increase of population, which I have classed under the heads of preventive and positive checks, it will appear that they are ALL resolvable into moral restraint, vice, and misery."—Malth., p. 19.

"The checks which repress the superior power of population, and keep its effects on a level with the means of subsistence, are all resolvable into moral restraint, vice, and misery."—Ib., p. 29 and p. 579.

‡ "If he attends to this natural suggestion, the restriction too frequently produces vice. If he hear it not, the human race will be constantly endeavouring to increase beyond the means of subsistence.

"This difficulty (of acquiring food) must fall somewhere, and must necessarily be severely felt in some or other of the various forms of misery, or the fear of misery, by a large portion of mankind."—Ib., vol. i., p. 4.

ancholy dilemma! What a sad alternative, if the system had been a verified hypothesis!

On such views, marriage, although the appointed source of the continuation of the human race on earth, and their most universal and improving cause of happiness, becomes the means of accelerating general misery and depravity, and involves every one who enters into the state in the personal criminality of assisting to produce such evils; for nature and its Author give no right to any one to marry more than another, nor have authorized any to say, "You shall live single that I may wed." There is no charter or law from Heaven for wealth or property to produce the new generations that are still ordained to succeed, and no command for poverty to remain in unoffending celibacy; all have the same natural right and liberty to unite or not in wedlock, as they may prefer. Hence, if this system were the true one, the man of property sins as much by marrying as the man of none; for as it is the progeny which is the evil, whoever has the offspring, whether rich or poor, becomes the criminal producer of the mischief, by the addition he makes to the human race. In these new instruments of multiplication, who will in their turn follow his example, he contributes to ensure to society an accompanying succession of vice and misery. Mr. Malthus declares explicitly that the principle which keeps his overwhelming law of geometrical multiplication on a level with subsistence is "the grinding law of necessity, misery, and the fear of misery."* He charges the very system of nature and man with the imputation of being thus constituted.†

The theory of Mr. Malthus was contested by several, but

* Malth., vol. ii., p. 24. He repeats this sentiment as his own deliberate view of his system. "It is a perfectly just observation of Mr. Godwin, that there is a principle in human society by which population is perpetually kept down to the level of the means of subsistence. The sole question is, what is this principle? Is it some obscure cause? Is it some mysterious interference of Heaven? Or is it a cause which has constantly been observed to operate, though with varied force, in every state in which man has been placed? Is IT NOT MISERY, and the fear of misery, THE NECESSARY AND INEVITABLE RESULTS OF THE LAWS OF NATURE, which human institutions have tended considerably to mitigate, though *they can never remove?*"—Malth., vol. ii., p. 35.

† "The truth is, that, though human institutions appear to be, and indeed often are, the obvious and obtrusive causes of much mischief to mankind, they are, in reality, light and superficial in comparison with *those* deeper-seated causes of evil which result from the laws of nature *and the passions* of mankind."—Ib., p. 24.

erfully by his ablest and latest antagonist, Mr. Sad-
ightly attacked the assumed principle itself. This
a denied the natural law to be as it had been stated.*
ed on the erroneousness of the supposed facts and
s relative to the States of America, on which the
theory was founded,† and entered into much detail
migrations to North America, which had so much
d to enlarge its population,‡ and which Mr. Malthus
dequately considered, but had greatly underrated.
r then stated at length his own views of the actual
pulation, and copiously discussed several important
l circumstances by which it was illustrated.◊ His
too digressive and diffuse, and wanted selection and
tion, with some corrections. It was rather a series
ns, without due order and connexion, than a well-
reatise; but it was written with right, though warm
nd on just principles. It shook with great force
ken system it opposed, suggested many valuable
l led the inquirer to more enlarged views and to
easoning on a subject which is becoming every day
ortant in every country to be accurately understood.‖
d be unjust to depreciate the intentions or the ability
althus. He brought forward his theory expressly
act some pernicious extravagances of Mr. Godwin,
Political Justice" made for a time nearly as great

an increase, under the most favourable circumstances for its
t, *does not* proceed in a geometrical ratio, but is constantly
n a totally different principle."—Sadler's "Law of Popul.,"
01.

‡ Ib., vol. i., p. 427, 579.

I presume to call the law of population may be thus briefly
. The prolificness of human beings, otherwise similarly cir-
, varies *inversely* as their number," vol. ii., p. 352. "Human
ase in a different proportion, and one which is *constantly*
y their *coexisting* numbers," vol. i., p. 103. He then makes
arious tables from the population of several countries to
w, and reasons largely on many topics which he considers
ng to establish it.—Ib., p. 472–612. His second volume is
show that the periods of duplication assigned by the anti-
ts "as those in which mankind would increase, if unre-
in every instance, and under the most favourable circum-
ossibilities," vol. ii., p. 45.
y said, "the whole system of population is under the un-
ction of the Deity, either through the operation of those sec-
es resulting from *his eternal* prescience, or from his perpet-
ntending *Providence*," vol. ii., p. 321.

an impression as the publication of Mr. Malthus, and who meant to subvert some of the most established truths in both religion and morality. Dr. Parr and Sir James Mackintosh vigorously attacked him;* and to overthrow one of his dogmas, the natural, and self-producible, and advancing perfectibility of the human being, Mr. Malthus produced the contrary hypothesis, that this perfection was impossible, because society had, in this ever-acting law of its population, a continual principle of degradation, misery, and vice. Eager to vanquish his adversary, he did not at first perceive the consequences that would be deduced from the doctrine which he used as his victorious weapon; and when these began to appear he had become too fond of it, and he found it too much applauded by others to believe it to be defective or injurious. It must also be stated, that the advocates for his new-started theory have comprised men that have been eminent both for knowledge and philanthrophy. It has still many patrons, who think that, by upholding and applying it, they are rendering much service to mankind. I respect their motives and their characters; and have only the same desire of truth which actuates them, when I express in these letters the thoughts and circumstances which have led me to the conclusion, that the Malthusian hypothesis is unfounded in fact, and therefore a fallacious misconception.†

* It was in his celebrated lectures that Sir James attacked Mr. Godwin's doctrines. "He now came forward to defend the very foundations of society against the fury of a wild enthusiasm which usurped the name of reason."—Memoirs of his Life, vol. i., p. 110. On these exertions Mr. Hazlitt says, "The modern philosophy, counterscarp, outworks, citadel and all, fell without a blow, by the whiff and wind of his fell doctrine, as if it had been a pack of cards."—Ib. Sir James afterward acknowledged, with a kind candour, that he had been too strong in his language on this occasion. "I condemn myself for contributing to any clamour against philosophical speculations."—Ib., p. 134.

† The ability with which Mr. Malthus urged his opinions for a time while impressed me in his favour; but its manifest incompatibility with the wisdom and beauty of the natural creation, and with what I could discern of the economy of human life in other respects, gradually inclined me to the belief that it was a fallacy. Further thought increased this feeling, but I had not leisure to make the investigations which were necessary for a fair judgment. In this state of mind, Mr. Sadler's book roused me to examine the question as fully as I could, for my own information by independent researches, additional to his, but I was benefited by his reasonings and statements. What was thus begun for my own satisfaction my present work made it a duty to continue, in order to ascertain what was the exact truth on the subject: my inquiry ended in the *results which* I will proceed to specify.

LETTER VII.

...sible or necessary Connexion in Nature between Population and ...getation.— Their relation is Intellectual and Artificial, arising from ... Plan and Mind of the Creator.— America no support to the Mal...usian Ratio.— Countries resorted to by Immigrants, or enlarged by ...onquest, no Authority for the Laws of Natural Population.—In...ances of this in Canada and Russia.

My dear Son,

The questions of population and subsistence have been ...erally intermingled in the discussions about either; but ...nderstand them accurately, as natural results proceeding ...n the natural laws which have been appointed to produce ...n, it will be better to consider them separately. They ...inate from very distinct processes in nature, and under ... different laws, although both are meant to have a per...al relation and alliance with each other. But they are ... visibly connected together, more than the metal with the ...n, or the bird with the cattle. Their association is a ...ntal conception of the Creator, and likewise in us and in ... animal creation. No tangible links unite us with our ...d or pull us to it. This is made and intended for our ...tenance; but we, like all that use it, have to learn its use; ...earch and to find out what we are to eat, and, from the ...erience of the necessity and benefit, to establish a con...al relation with it.

Independent of the original relation formed in our Creator's ...d in his plan of our creation, and independent of the ...equent connexion which mankind, as they gradually dis...ered the use, have established between themselves and ... the means of subsistence which they have found to be ...vided for them, there is no positive connexion in nature ...tween animal life and the materials of its sustenance.

The corn and grass grow, whether men, sheep, or cattle ... or are not in their vicinity; and animals multiply from ...r own bodies, under laws and circumstances quite dissim...r to those of vegetable reproduction.

This fact *is another indication of* an intellectual creation;

for if the provision had not been devised by the se
which produced animal life, and so formed that
have the relation and use to animal life which it
found to possess, no such relation would have exis
ture, or have been discoverable or applicable by a
beings for their nutriment. The origin, process, an
forms and substances of vegetables and animals
tirely different from each other, and independen
other, and the plant being so wholly unconnected
animals as to flourish most abundantly where they a
the relation between these two kingdoms of or
could not have existed except from the plan, and in
and by the consequential operations of a thinking a
ing Maker. There are, accordingly, no relations of
sort between us and anything else in our world. T
the earth, the iron, and the crystal are not conver
subsistence for us, because no relation of that sort
part of our Great Author's designings, or has be
lished by him. Thus the relation between us and
proves itself to have originated entirely from his c
and will.

Our reason may rest with the satisfaction of ce
this conclusion; for if anything can have been pla
superintended, or be a subject of the care, direction
sisting government of its creator in human affairs,
we more rationally assume to be so than our popul
our subsistence?

It is daily essential to us that these should be du
ed, as life on earth has been framed on a subsisting
menting system. The coincidence between our foo
multiplication must be, therefore, an object of the c
attention of our wise and benign Sovereign, till h
that no more human beings shall be born. Whe
reaches this point of his arranged plan, we may be
he will signify it to us by some direct annunciatio
especially as such a revolution in human nature wi
precursor to those awful changes and consequenc
may be expected to arrive in that period when "T
be no more."

At present we have the evidence of nearly 6,0
that he has never failed to keep our coexisting num
our sufficient subsistence in mutual fitness to eac

ver has nature become incompetent to supply the largest
nber of inhabitants which, during this long lapse of time,
e been contemporaries of each other. Never have more
nan beings been on the earth than that earth, wherever
y cultivated by them, has always supplied—always, for if
harvests fail in one place, they abound in another, as in
present year. America, that usually seeks to pour her
berances of produce into Europe, is now* drawing from
rope the supply which a temporary deficiency of her last
son occasions her to require. So Russia last year, and
land occasionally; at times also part of India. Such vi-
situdes only promote the intercourse and friendship of
skind with each other, and teach even distant and the most
tile nations the great lesson, which the smallest society
s, and which every individual should remember, that we
need each other's aid and interchanged attentions, and are
ned to do so; and that this kind necessity is kept in fre-
nt operation upon us, that we may never forget that we
by nature, and in our relation with our Creator, all breth-
—all the children of one universal Father; and that it is
desire and system of our being that we should always
and act as such whenever we are together. On no other
ciple could a heaven be a heaven, or any human being be-
e fit to reside in one. On this principle, if it steadily actu-
l us all, our present earth would, in no long time, be a ce-
al prelude to that concentration of glory and felicity which
distinguish the promised kingdom that is offered to us
, if we choose to use the explained means of securing it;
which it is left at our present option to avoid and lose, if
prefer to exist elsewhere.

n all our discussions on the laws and effects of population,
should have the principle of the Divine superintendence
iently in our recollection; because we shall not then be
y or eager to adopt any theory that is incompatible with
It is our duty always to desire, and only to value the real
t, whatever that be; but until we have fully explored this
luable jewel, and with the same exactness with which we
ue our philosophical demonstrations, the principle that
our increase and our subsistence occur under the gov-
nent, and according to the regulations of a presiding and

* 1836-7.

conscious Deity, will preserve us from those unmanly
and gloomy prospects of society on which even our legis
have been solicited to act. Such alarms and excitatior
irrational in all who believe in an intelligent Creator;
unjust to him, after the abundant testimonies which h
given to us, in his splendid and beautiful works, and pe
ally to ourselves, in our individual life, of his guardian
dom and goodness; and not a little dangerous, unfrie
and prejudicial to those who will always be the major
all communities, and who, like the great rocks and mas
our globe, are the foundation supports of all that are
them, and the human producers of all the convenience
gratifications by which every class is gladdened. M
these were not on our earth till enlarging numbers mad
arms that provide them, and gave the stimulus to the h
mind to be thus inventive and creative for the general gc

Let us, then, regard the system of our population as
of the Divine plan, which has its own objects as well
own laws, and is as much insulated by these from all
living beings as it is from the material substances and m
powers about it. All such things are materials, and assis
and instruments, and means which human beings are t
for their benefit and actions in their earthly life. Bu
population is not multiplied for any of the ends and pur
which attach to other objects on our surface. Our n
capacity, notwithstanding its similarities to its inferiors,
all its greater powers, universally superior to every other
principle on earth. With this, the laws and system o
population are chiefly connected. All that is bodily
has been framed to be within our material substance, sol
compose and support a mechanism for our intellectual s
employ and act with. Population should therefore nev
considered as a physical question only; it is always a n
a political, and an intellectual one. Its scheme, laws, p
ses, and conduct have always this reference in our Cre
plan. It has been made to resemble animal life in the
and causes of birth; but from this moment its similitu
minishes, and, in most things, ceases; and all that is diff
after its birth begins with its first infant cry, and continu
enlarge into essential diversities, except in its system of
ing, respiration, circulation, and such like functions, as
as it exists in its present earthly consciousness. I

at last with its closing assimilation; but even this nity of likeness is confined to our material substance. ecomposes into the gases and dustlike particles which uted its visible figure, as every other animal frame dis- ; but the taught, and trained, and thinking, and feeling asses into a state which nothing below itself can ex- e, because nothing else can be what it was in its in- ial nature when it commenced its human life, nor what become by the time when this discontinues. With all ritual results of this stage of our being, our population nected; for in its individualities it comprises them, and ways consist of them, in addition to its original vitality pacity. It is therefore a small view and a one idea to e that it has no laws or objects attached to it but those concern its animal producibility. Yet, looking for a t only at these, I am fully satisfied that they have been ceived and misstated.

founding error of the theory of Mr. Malthus was, that de the population of North America, as its numbers exhibited at various successive periods of increase, the f his supposed law of the geometrical multiplication.* the fact that the numbers of persons living in the States, at the successive periods of their enumeration, , when compared together, an unusual augmentation.† such appearances, before 1798, Mr. Malthus was led to in the northern states of America the population has und to double itself, for above a century and a half ively, in less than in each period of 25 years."‡ He t duly consider that continual streams of emigration en pouring into this continent at various intervals

thus's Letter to Mr. Godwin, p. 122. I have not this pamphlet, Sadler cites it as his authority for saying, "The very existence eory is professedly thence deduced."—Sadler, vol. i., p. 397.

population of America was stated, in 1770, to be 1,500,000. sus, taken at five periods afterward, declared the following

1790			3,929,328
1800			5,309,758
1810			7,239,903
1820			9,638,166
1830	White	10,530,044	12,858,670
	Black	2,009,050	
	Free coloured	319,576	

Gen. View of United States, 53-55.

h. Ess. on Pop., vol. i., p. 6.



from its first colonization, and that the increase he r had not resulted from the multiplications of its orig tlers only. He treated this important contribution American population as insignificant,* and thus sett self in a delusion from which he never emancipated But in searching out the true laws of population, vious that no country should be made the standard emigrants were resorting.† For unless accurate regi been kept, discriminating the ancient settlers and tl geny from the various new comers and their descend comparative amount of its whole population at any sive period would not exhibit the effect of the n crease of the original numbers. No such separa been made, and therefore it was an illusion at the take the doubling of the numbers in North Americ were proved, as an indication of the established and principle and law of nature for the human increa even the American population, taken in its mass, im and all, does not, in its chief separate states, justif duced ratio of Mr. Malthus.‡

* Mr. Malthus allows only "10,000 per annum for Europear which, he says, would be 90,000 in the nine years Mr. Sadler vol. i., p. 560. How inaccurate this estimate of the supplies gration is we may infer from the stated fact, that in the e from 1825 to 1832 there went to the United States, from Gre and Ireland ONLY, 136,812 persons.—Herts County Press, 12th

† The facts collected by Mr. Sadler of the series of immi America, which he had found mentioned, are curious and show that her population was continually enlarging from thi See Sadler, vol. i., p. 432-519.

‡ Thus Mr. Malthus states that the population of NEW was, in 1643, only 21,200.—Malth., vol. i., p. 559. Mr. Sadler tend to prove that it was then far more numerous; but takin number, if they had doubled every twenty-five years, they ough to have become 2,713,600. But the census of 1820 shows tha years later they were only 1,424,090.—1 Sadler, 422. So in of RHODE ISLAND: in 1730 the numbers by the census w These, on the Malthusian ratio, ought to have been 143,96 and 287,920 in 1830; whereas they were only 80,038 in 182 more than 97,199 in the last census of 1830. In like ma JERSEY. In 1738 the population was, according to Dr. Pric authority of Mr. Malthus, 47,369. These, on his ratio, shoul come 378,952 in 1813, and above 500,000 in 1830. But in the this year they are stated to have been only 320,823, and in 18 So CONNECTICUT, according to Dr. Holmes, had 208,,70 1781. These ought, in 1831, to be 835,480; but in 1830 they 297,675. VIRGINIA, in 1671, contained above 40,000 perso *in 1830,* ought to have been multiplied at least to 14,260,000; I

Ve have an instance in our Canadas how much we should lead ourselves if we took the law of population from its gressive augmentations there, or from other provinces of ish America, as Mr. Malthus did from the multiplications he United States. In the British possessions, the whole bers of the inhabitants were under 110,000 in the year 4, but in 1830 they had become 1,054,000.* Here, in than two 25 years, they had not only twice doubled, but had received a tenfold multiplication. So that, if we our view of human increase from this example, we should ert that it proceeded in a tenfold instead of a fourfold pro-tion. The multiplication was as certain in the one case n the other; but the error of both would be that of attrib-g to a natural progression what was principally derived n the adventitious circumstance of successive immigra-s.†

were only 1,211,405.—Ib. Thus, in these five chief and old states, all their accessions from immigration, the actual results contradict ssumed geometrical hypothesis. I take the earlier dates from the ority quoted by Mr. Sadler, vol. i., p. 404-23, and the census of 1830 the American publication, "General View of the United States," p. 3. Mr. Flint, in his "Mississippi Valley," states the populations, in in these numbers; Rhode Island, 97,212; New Jersey, 320,779; necticut, 297,711; Virginia, 1,211,272; vol. i., p. 232-4. All nearly ame numbers as in the other American authority.

Mr. Richards, in his report to the Colonial Secretary, thus states e facts:—

1784. Upper Canada almost nothing.

Lower Canada	65,338
Nova Scotia	32,000
New Brunswick and Newfoundland	12,000
	109,338

Call the total in 1784, 110,000.

1832 it may be taken as thus:—

Upper Canada	200,000
Lower Canada	544,000
New Brunswick	80,000
Nova Scotia	130,000
Cape Breton, Newfoundland, and Prince Edward's Island	100,000
	1,054,000

enfold increase in forty-six years.—Richards's Report.

n Mr. Richards's report he calculated the population of Lower ada to be 544,000; but the actual census, taken in 1831, ascertained precise amount to be 591,863, which were thus curiously distin-ed:—

If, from the whole of British America, we should select Upper Canada only as our standard, the rate of increase would be still more prodigious. At the passing of the Canada Legislation bill in 1791, the population of this province was estimated to be only 10,000.* In the war of 1812 it had enlarged to 50,000,† and in 1833 it amounted to above 296,000.‡ Thus, in forty-two years, its inhabitants had multiplied, not in a fourfold, or even a tenfold ratio, but in nearly a thirtyfold proportion. They were almost thirty times as numerous in 1833 as they had been in 1791. What a glaring self-delusion it would be if we should build on this event a hypothesis that population had a perpetual tendency to increase in a thirtyfold ratio! Yet this would be as rational as it was to make the doublings in the North American States the basis for deducing the law and principle of human multiplication, and not to perceive that immigration had produced the extraordinary numbers in the one country as well as we can prove it to have done in the other. It would be indeed more rational to make British America the standard than the republican provinces, because the additions from immigration were more likely to be more numerous into these than into our present colonies. Our immigrations have been from Great Britain and Ireland alone;§ while settlers from all parts of Europe and from the West Indies, and a continual importation of

Church of England	46,088
Church of Scotland	20,903
Methodists	7,933
Presbyterians	8,979
Baptists	2,560
Jews	102
Other denominations	5,630
Roman Catholics	463,938

Brit. Mag., 1833, p. 600.

* Bishop Tomlins's "Life of William Pitt," vol. ii., p. 380. Lower Canada was then computed to contain 100,000 persons.—Ib. But in 1831 the number had arisen, as above, to 591,863. This was nearly a sixfold increase in forty years.

† "In the war of 1812, Upper Canada, with a population of only 50,000, repelled its invaders."—Un. Serv. Jour., July, 1832.

‡ By the returns to the House of Assembly, Upper Canada contained in 1823, 150,169; in 1827, 176,059; in 1830, 234,865; and in 1833, 296,544. —Montg. Martin's Colonies, vol. i., p. 207.

§ Thus Scotland alone has nearly peopled Prince Edward's Island in these parts. This island contains from 30 to 35,000 souls, most of them emigrants, who do not speak any other language but that of their native country, the Gaelic of the Highlands.—Bib. Soc. Report, 1802, p. 66.

slaves from Africa,* have swelled the numbers of the North American population.

Nor can there be a doubt that our Canadian augmentation has arisen chiefly from immigration; for we have some accounts of the actual emigrants who went over, which justify the ascription of the multiplication to their successive influx. In the four years from 1829 to 1832, no fewer than 145,000 emigrants arrived in Canada,† and a continued stream had been flowing to it, though in less numbers, during the preceding periods.‡ The increase of the population of the United States has been so much promoted and produced by the same enlarging cause which has thus advanced the numbers of Canada, that the reasoning and inferences which apply to the one are as just and necessary to the other. The multiplication of either has not arisen solely from that of the original settlers, according to the natural law of human population acting on these; but likewise from the continual influx of new colonists, and from their perpetual reproductions and expansions in their posterity.§ The general laws of human multiplication must

* It is scarcely necessary to inform the American reader, that in making this statement Mr. Turner has committed a great error.—*Am. Ed.*

† I find them thus enumerated and distinguished:—

"Emigrants to Canada for the last four years.

	1829.	1830.	1831.	1832.
From England and Wales	3,565	6,799	10,243	17,731
Ireland	9,614	18,300	34,133	27,631
Scotland	2,643	2,450	6,354	4,379
Nova Scotia	123	451	424	164
New Brunswick and other places				
	15,945	28,000	51,154	49,905

Making, in all, 145,004 souls."—M. Martin's Col., vol. i., p. 328.

‡ In the ten years before 1829, the following numbers have been stated as arriving at Quebec.

1819	12,907	1824	6,515
1820	11,239	1825	9,097
1821	8,050	1826	10,731
1822	10,468	1827	16,802
1823	10,258	1828	11,697

New Farmers' Journal.—15th June, 1834.

§ So rapidly do numbers increase from immigration, that the Governor of Upper Canada, in his speech to its parliament on 31st October, 1832, stated that its population had increased *one fourth* since the previous session of the legislative body; that is, within a *few months*.

not therefore be deduced from these countries, nor from any to which immigrations so largely flow.*

From the same cause of artificial multiplication, from sources distinct from the natural increase of the original stems, RUSSIA, though it has been resorted to as a prop to the geometrical theory, cannot be exhibited as giving it any confirmation in its augmented numbers; because this country has been, during the last century, gradually enlarged in its population by conquest, as America has been by immigration. The Russian population in 1724, under the reign of Peter the Great, was about eleven millions and a half;† but at the Empress Catharine's death, in 1796, it had become 29,177,960,‡ and is now supposed to be from fifty to fifty-four millions. But one third of these are the present amount of the inhabitants of her added provinces,◊ which have been successively obtained during the last century. The amount of these is surprising when put together.‖ Even those which she has

* The augmentation of particular towns from settlers is striking. Thus Mr. Dunlop remarks of one, that, *sixteen* years ago, the town of Rochester consisted of a tavern and blacksmith's shop; it now contains 16,000 inhabitants.—The Backwoodsman, ch. 3.

† The first census of Peter the Great, in 1722, gave the males paying taxes at 5,794,928, which, with an equal proportion of females, would amount to 11,589,856.—Pink. Russia. The males in 1724 are stated by Sieverni, in the Arkh., 1825, as 5,373,030.—Bull. Univ., t. 11, p. 307.

‡ Sadler's Popul., vol. ii., p. 484. Dr. Pinkerton mentions the numbers in 1812 as 37,700,000. Mr. Sadler, from the additions of the annual excess of births, makes them 36,797,221 in that year.

◊ Dr. Pinkerton, in his "Russia," states these to be,

The Poles and Lithuanians	8,000,000
Finns, Livonians, Esthonians, and Germans . .	3,000,000
Jews	2,000,000
The Caucasian, Crismena, Kacan, Astrachan, Baskeer, Kenjizian, and Siberian Tartars, all Mohammedans	2,000,000
The Memphian, Kalmuck, Manjur, and other heathen tribes of Siberia belonging to the Buddish and Shaman idolatry	1,000,000
The Georgian nation, with the recently conquered provinces of Persia, and the Armenians . .	1,500,000
	17,500,000

He reckons the Russians themselves to be now thirty-six millions, and thus considers the collective amount of all to be above fifty-four millions.

‖ The author of the "Progress of Russia" remarks that she "has made acquisitions from SWEDEN greater than what remains of that ancient *king*dom; her acquisitions from POLAND are as large as the *whole* Aus-

gained since 1772 have more than doubled the previous extent of her territorial empire in Europe.* The numerical increase of her population cannot therefore be adduced in support of the Malthusian ratio. Nor is it likely, if it were correctly ascertained, that it could ever confirm it, on account of the servile state of its people; for it seems that a very minor part only of them are not in this class.† The rest are still slaves, without any civil rights; and as they cannot marry without their owners' leave, we may be sure that such masters would never let their multiplication be inconvenient to them.‡ It is painful to add that there is at present no prospect of their being relieved from this depressing condition.§ The territorial additions of Russia, and the servile subjection of her people, so unfavourable to rapid increase of population, preclude her from being the standard of its natural laws.‖

trian empire; that the territory she has wrested from TURKEY IN EUROPE is equal to the dominions of Prussia, exclusive of her Rhenish Provinces; her acquisitions from TURKEY IN ASIA are equal in extent to all the smaller states of Germany, the Rhenish provinces of Prussia, Belgium, and Holland taken together; the country she has conquered from PERSIA is about the size of England, and her acquisitions in TARTARY have an area equal to Turkey in Europe, Greece, Italy, and Spain."—See the "Progress of Russia in the East."

* "The territory she has acquired within the last sixty-four years *is greater* in extent and importance than the whole empire she had in Europe before that time."—Ib.

† Dr. Pinkerton notices the privileged orders in Russia to be,

The nobility, males	225,000
The clergy	243,500
Civil officers	780,000
Emancipated peasantry	550,000
Freeborn peasantry	97,000
Military force	900,000

The slaves are in two orders, those of the crown and those of the nobility. "The slaves belonging to the nobility are estimated at above twenty-one millions. Those of the crown at fourteen millions."—Dr. Pinkerton's Russia.

‡ Dr. Pinkerton informs us that, "properly speaking, the Russian slave has no right and can possess no property. Himself, his wife, and children, and all that he possesses, are the property of his lord. He cannot purchase, enter into trade, *or marry without his lord's consent.*"

§ "The Emperor Alexander had a great desire to raise the slave from this degraded condition; but his plans met with a decided opposition from the principal boiars in the empire, and since his death no attempt has been made by government to further his enlightened purposes."—Pinkerton's Russia.

‖ A Russian thus states her successive enlargement: "When Peter the Great acceded to *his throne, the extent* of Russia was 534,878 square

LETTER VIII.

The state of the American Population from 1800 *to* 1830 *unfavourable to the Malthusian Theory.*

My dear Son,

As the Malthusian theory originated from calculations on the apparent population of the united provinces of North America, and has been adhered to chiefly on that account, I think it right to suggest some further considerations which seem to indicate, from its own elements, that it is not possible it can double itself in the alleged ratio of twenty-five years.

Human life, instead of being longer, appears to be briefer there than in most European countries; and yet the marriages are not much more prolific than is necessary to keep up a population to a subsisting amount. As the general impression has been very contrary to this, I will explain the facts and reasoning on which my conclusion has been formed.

We find, from the North American census of 1800, that in the United States at that date nearly one third of the white population was under ten years of age; that above half of it were under sixteen years, and nearly two thirds under twenty-six;* so that not much more of their living males than one

leagues; his conquests added to it 20,000 more. Catharine I. and Peter II. also enlarged it. The Empress Anne obtained 88,000 square leagues, so that, at the end of her reign, Russia contained 641,048 square leagues. Catharine II. extended largely its aggrandizement, and even Paul I., so that in 1799 it comprised 698,944 square leagues. Under Alexander, by various events and treaties, and since, it was so enlarged as to comprise, in 1834, 725,780 square leagues, having gained 210,000 square leagues in one century, and all rich and fertile provinces."—Russland's Territorial Vergrœsserans. It was then under forty-three eparchies or governments.

* In the census of 1800, the free white males were returned as being 2,194,225; of these, the first class, under ten years, were 715,046. Those above this age, but under sixteen, were 343,650, making, together, 1,058,696 males under sixteen. Those of sixteen and under twenty-six were 393,934. Thus the males in 1800, under twenty-six years old, were 1,452,630 out of 2,194,225. This was rather less than two *thirds*, as these would have been 1,462,816.—Gen. View of Un. States, *p. 53.*

third was then above twenty-six years of age, and not above one eighth of them had reached forty-five.*

These facts show us how limited the number of the fathers of the new population could not but be. Not one half of the existing race could be so, even if all had married at sixteen; not one third were alive to have offspring at the age of twenty-six, and only one eighth at the mature period of forty-five. The mortality implied by these proportions is unfavourable to any large increase.

Ten years afterward, in the census of 1810, we find these relative amounts continuing much the same. Above one third were then under ten years; above half were under sixteen;† not one third were above twenty-six; and not one eighth were above forty-five.‡

In the official census of the next decennial period, 1820, we find nearly the same proportions still subsisting. There also above one third of the males were under ten; not quite a moiety were under sixteen; above two thirds were under twenty-six; and not one eighth were more than forty-five.§ What country in Europe presents to us a greater abbreviation of human life than these numbers—one eighth only above forty-five!

* The numbers who had attained twenty-six, but were under forty-five, were returned to be 478,520, leaving only 263,075, who were forty-five years of age and upward, out of the 2,104,225.—Gen. View of Un. States, p. 53.

† In 1810, the free white males had increased to 2,988,141; of these, those returned as under ten were 1,035,278; those of ten and under sixteen were 468,183 more, making 1,503,461. The number of those who had reached sixteen, but were under twenty-six, was 547,597. Hence 2,051,058 males were under twenty-six years of age out of 2,988,141, or more than two thirds; for the two thirds would have been only 1,992,026. Hence fewer were twenty-six and above in 1810 than in 1800, as if human life had there rather lessened in duration during those ten years instead of increasing.

‡ The males of twenty-six and under forty-five were found to be 937,347, and only 364,736 males were of forty-five and upward out of 2,988,141, which were not an eighth part, as this would have been 372,517; so that above seven eighths were under forty-five in 1810.

§ The numbers returned in this census were of free white males:—

1st class, under 10	. . . .	1,345,220
2d "	of 10, under 16	. .	612,535
3d "	of 16, under 26	. .	776,150
4th "	of 26, under 45	. .	766,083
5th "	of 45 and upward	. .	495,065
			3,995,053

One third of these would *have been 1,331,684*; one half, 1,997,526; two thirds, *2,663,368*; *and one eighth* would have been 499,381.

concurs, with the shortened lives of the male sex, to make a doubling in twenty-five years physically impossible.

In the census of 1810, the females who then could be mothers could only replace their contemporaries and themselves by every one having five children; for there, above one third were under ten,* nearly one half were under sixteen,† and not two fifths were between fifteen and forty-five.‡ For those who only could be mothers to renew the existing population, every one must have above five children.§ Similar results arise from the population of 1820,‖ and likewise in the altered scale of 1830.¶ In the last, nearly one third

* In the census of 1810 the white females were returned to be 2,873,950; of those under ten years were 981,426; one third would have been 957,983.

† Under sixteen were 1,429,748; one half would have been 1,436,975.

‡ Of sixteen and under forty-five were 1,105,824; two fifths would have been 1,149,580.

§ The whole white population of 1810 were :—

Males	2,988,141
Females	2,873,950
	5,862,091

Now five times 1,105,824, the number of women between fifteen and forty-five, would be 5,529,120; so that every marriageable female must have, upon an average of all, above five children each, in order to reinstate only the number of the then existing generation, without any increase.

‖ The census of 1820 returned 3,866,657 free white females, of the following ages :—

Under 10	1,260,550
of 10 and under 16 . . .	605,348
of 16 and under 26 . . .	781,371
of 26 and under 45 . . .	736,600
of 45 and upward	462,788

¶ In the census of 1830, we find the free white females to have been thus classed :—

Under 5 years	920,104
of 5 and under 10 . . .	751,649
of 10 and under 15 . . .	639,063
of 15 and under 20 . . .	597,713
of 20 and under 30 . . .	915,662
of 30 and under 40 . . .	556,565
of 40 and under 50 . . .	355,495
of 50 and under 60 . . .	222,928
of 60 and under 70 . . .	130,866
of 70 and under 80 . . .	58,034
of 80 and under 90 . . .	17,573
of 90 and under 100 . . .	2,494
of 100 and upward . . .	234
	5,167,830

Flint vol. ii. p. 229

were under ten; nearly four ninths were under fifteen;* not much more than one fourth were above thirty;† more than one seventh were above forty;‡ not one twelfth were fifty;§ and only between a twenty-fifth and twenty-sixth attained sixty;‖ less than one in seventy-one had become seventy years of age.¶ Their vital duration was a little longer than that of the male sex. But we may submit it to the judgment of our statistical calculators, whether it is possible, with these established relative proportions of the different living ages of our North American contemporaries, that they could, from their own nativities alone, enlarge their population in a geometrical ratio. Instead of this, I cannot avoid thinking, from all the above circumstances, that if there had been no immigrants to them, the United States would not have done more in the thirty years we have been surveying than keep up their own population, or but very gradually increase it.

Both Mr. Malthus and his followers have made a distinction between the multiplying ratio of the older states of America and their new or back settlements; because, on the comparison of their numbers in the latter at different dates, a greater increase was visible than in the former. But here again the effect of immigration has been mistaken for that of natural birth; the new states have not swelled into their enlarged numbers from the successive reproductions of their original inhabitants. There has been, and is still, a constant influx of new comers; the travellers into America

* Under ten were 1,671,753. One third would have been 1,722,433. Under fifteen were 2,310,816; four ninths of all would be 2,296,576.

† The females under thirty were 3,824,191; three fourths would have been 3,875,472. Those of thirty and above were 1,343,108; taking from these one tenth of the next class as the number who reached thirty, those above thirty would be 1,287,552. One fourth would have been 1,291,824.

‡ The number under forty was 4,379,756; and those of forty and above were 787,543. If we take off one tenth of the next class as those attaining forty, the number above that age would be 752,001. One seventh would have been 738,185.

§ Of fifty and above were only 432,118 out of the 5,167,299; deducting one tenth of the next class for those who reached fifty, those above that age would be 409,826. One twelfth would have been 430,608.

‖ Those under sixty were 4,958,109; adding to these one tenth of the next class for those who were sixty, those above sixty would be only 196,104. One twenty-fifth would have been 206,692.

¶ Under seventy were 5,088,975. One tenth of the next class would make those who attained seventy 5,094,778. Those above seventy would be 72,521. One in seventy-one would have been 72,778.

agree in this; hence, if their numbers have doubled in ten, fifteen, or twenty-five years, as different advocates of the geometric ratio have thought, the greater rapidity of their augmentation is a mark of the unceasing accession of new roamers thither, not of their maternal prolificness. To them the unprovided, the necessitous, the restless, the enterprising, and the dissatisfied are continually moving; and from these fresh tides of human life, originating in other parts, their enlarging multiplications have principally proceeded. Mr. Sadler has collected some authorities on this point as to former times; but the fact is so clear from all the accounts of America since the present century commenced, that only the "Qui vult decipi" will allow himself to be influenced by any contrary supposition.* The hardships, diseases, gross food, and great use of spirituous liquors in the dreary back settlers, must be unfriendly to large and rapid increase of lasting population.†

* Louisiana. "The population in this state increased in ten years more than 600 per cent." "In the upper settlements the inhabitants are principally Canadians; in the middle, Germans; and in the lower, French and Spaniards."—Carey and Lea, Geog., p. 281. Warden says, the inhabitants are composed of men of every country in Europe.—Stat. Acc., vol. ii., p. 531, 567.

Indiana. The increase from 1810 to 1820 was upward of 500 per cent. "A majority of the people are from Kentucky, Tennessee, Virginia, and the Carolinas. The remainder are from every state in the Union and from every country in Europe."—Carey and Lea, p. 290.

Illinois has trebled its numbers in the same time. This territory is principally peopled by the French, with numbers of immigrants from both England and the United States.—Warden, vol. ii., p. 57–9.

Ohio. Of this state Dr. Drake says, "There is no state in the Union which has not enriched it with some of its most enterprising citizens; nor a kingdom in the west of Europe whose adventurous exiles are not commingled with us. To Kentucky and the states north of Virginia, to England, Ireland, Germany, Scotland, France, and Holland we are most indebted."—Drake's Nat. and Statist. View, p. 257.

Tennessee. "It has scarcely any uniform character, its population consisting of immigrants from the Carolinas, Virginia, Georgia, and the New England States and from Europe."—Warden, vol. ii., p. 351.

Kentucky. Imlay says, "I have known upward of 10,000 immigrants to arrive in the single state of Kentucky within one year, and from 4 to 10,000 in several other years."—Topog. Disc., p. 84. Malte Brun mentions of it, "The people consist of immigrants from every state in the Union, and from every country in Europe."—Geog., l. lxxx., p. 199. Sadler, vi., p. 486–8. How can the back settlements afford any basis for the law of native population?

† Reasoning from the official returns of one of the most flourishing of the North American states, in the year 1825, that of New-York, it would take above fifty years to double its population. This was then *returned to be* 1,616,458. The numbers of married women were ascer-

LETTER IX.

The experienced Increase shows the real Natural Laws, which are not the same for every Period of Society.—State and Progress of Population in England, Scotland, Ireland, France, and some other Countries of Europe.

My dear Sydney,

The natural course of human population is represented to us, by its actual progress in the nations around us, in its habitual and general operation. A good example of this may be seen in its advancement and variations in our own land, and in the other civilized countries of Europe. In this, as in all things, the exception must be distinguished from the general rule, and never mistaken for it.

We are not only best acquainted with ourselves and our European neighbours, but we are certain of finding in our populations the practical operation of their appointed laws. Under these, they have become what they have been and now are; and it is with the practical operation of any law that we are politically concerned. We may leave abstract theories to the amusive speculations of metaphysicians. But we need to know the acting laws of our daily nature for our moral and legislative guidance; and it is from the experienced effects that these can be most correctly traced. We must seek the real, not the possible. What may occur may also not occur; but what has taken place and is taking place is most likely to continue to recur. It will not, therefore, be wisely done to turn from the regular experience of the Old World to any pe-

tained to be 200,481; the females between fifteen and forty-five were 335,872; the marriages that year 11,553; and the births of that year were 60,383.—Nat. Gazette Philad., Feb., 1826. Therefore not one third of the married women had children that year, and between three and four years would elapse before at that rate they would have children. But the married women were not quite one eighth of the whole population. Hence it would be nearly thirty years before all their married women would have produced a number equal to this population. But an equal number would only replace those who died off; and as a generation die in about thirty-four years, it would require between fifty and sixty years before the actual population of 1820 would, at this ratio, be from its own sources doubled.

culiar or imagined anomaly in the New one. The ordinary results of life are our best instructers as to the natural rules or means which produce them: on these we shall most safely act, and not on extraordinary effects, from extraordinary causation, if such should be found.

Hence any theory of duplication would be very little deserving of our notice if it were such as very rarely was realized, and if such an effect could only take place under contingences that seldom could occur. It is on the results which have been regularly experienced, which come, as if the usual sequences of steadily acting laws, that we should deliberate and act.

In every department of nature, we found our science on this principle. We do not argue on lions from the supposition of what number it is possible they might produce at a birth; for if we took the possible accident for the natural law, we might contend that they would, in time, overrun the world, to the extinction of all other animals. Instead of taking a contingence for the basis of our reasoning, we seek for the common and experienced fact of their usual fertility. We then find that their possible power of increase is so regulated in its habitual operation, that no more offspring occur from the lioness at one birth than suits the coexistence of the other quadrupeds of their country.* Comets, according to the law of their projective movement alone, might, at any time they come, rush on in the line of our earth, and whirl, dissipate, or melt us in fiery destruction. This is never impossible. But we know from experience, that by agencies unknown to us, but potently guiding them, they have been always kept from our actual path; and from this practical fact, the never-ceasing possibility of the collision is scarcely even thought of

* Though the fewness of the lion's progeny has been deemed an argument of his noble nature, yet that lions *may be* as prolific as cats, we may perceive from the following circumstance which I take from the Cambridge Chronicle, Nov., 1836. "On Tuesday morning last the lioness in Mr. Wombwell's menagerie, exhibiting at St. Andrew's-hill, in this town, produced FOUR young cubs, all doing well. The lioness will not be three years old till next month. An instance of such precocity is not known in natural history, it being the opinion of most naturalists that the lioness does not attain maturity till five years old."—Camb. Chr. So we hear occasionally of four children born at one time; but this amount, though always within her power, is not the law on which *nature practically* acts. The practical operation is the regulated one, and *points to the* operating law.

by us—never seriously dreaded, though, for chitchat, talked of. In like manner as to our population. It is quite wrong to alarm ourselves and to prejudice our judgments by theoretical laws and conjectural possibilities, even if these were in truth as ruinous in the prospect as Mr. Malthus anticipated. The basis of our sound judgment should be, the careful observation of what, in civilized countries, the actual increase of population has hitherto been found to be. In this beneficial ratio it has hitherto glided on, never inundating, and always accompanied by its due subsistence as far as nature supplies it. No one can surely think for a moment that the multiplication will ever be greater in a savage than in a civilized community; nor in a demisavage one. And if it were, such a fact would be of no importance, and have no reference to us, or to any nation that is not in the savage or half-savage condition. It is with the actual and experienced natural increase of population in civilized countries that we are alone concerned; because we are in a civilized state, and shall go on to increase or decline by the laws of a population in that state, and not by others. If, therefore, it were true, which it is not, and I think cannot be, that the back-settlers of America doubled in twenty-five years, we are not back-settlers, and, therefore, never shall increase in that ratio. France, Spain, Portugal, Germany, Holland, indeed all Europe, are not back-settlers either; therefore, if they last 1,000 years more, they will never enlarge by the back-settlers' ratio, be it augmentative or diminishing. It would be as reasonable to say that tigers will assuredly multiply like guinea-pigs, because those little animals are peculiarly prolific. Each animal has its assigned law of increase, and keeps invariably to it, and is not affected by the rate at which others multiply. The different states and stages of mankind have each their respective laws and habits of multiplication also, which neither of them in that state or stage can ever pass, whatever be the enlargement of other conditions.

As far as I can judge, this appears to be the rational and practical view of the question, and as applicable to America as to ourselves. It is not of the consequence of a straw to the United States that their ancestors doubled at the geometrical ratio, if that had been the case, since it is becoming more generally admitted that they do not so multiply now.*

* In a very able article in "Blackwood's Magazine" on the voluntary

They cannot be again in their past state; and therefore cannot increase again by the laws and ratio which accompanied their anterior circumstances, whatever those were, but which will not so operate in any other condition.

Let us then commence our inquiry, which the nature of the present work requires to be but a brief and limited one, by observing the experienced facts on this subject. As I cannot afford space for a large examination and detail, I will select such as seem to be sufficient for a right judgment; and as we know most of our own nation, and, by the patriotic care of our legislators and their official agents, have had our population ascertained with all attainable accuracy, this shall be the first subject of our attention.

Our numbers in England, at the time of the Norman Conquest, may be taken at two millions;* yet, by the time of Edward III., no great increase appears to have occurred,† although we had been, on the whole, a prosperous nation in the interval, as much so at least as any other at that time in the world, and had not been molested by any foreign invaders, or wasted by the desolations which their armies might have caused. The inference, therefore, will be, that the laws of our population at that time produced a continual replacement of those whom death removed, but allowed little farther advance. No country has enjoyed so long, either in ancient or modern times, a succession of abler sovereigns, on the whole, than England has exhibited from the accession of William I. to the reign of George III.; yet in the 755 years from the landing of the Norman to the year 1791, when

principle, the intelligent author remarks: "Even in America, doubling as it does over the whole Union in *fifty*, and in the frontier settlements in twenty-five years."—Dec. 1836, p. 791. I would submit to his reconsideration, that the difference as to the frontier settlements may be expunged.

* This calculation is stated in the "History of the Anglo-Saxons," vol. iii., ch. 9, with the particulars from the Domesday enumerations on which it was founded. I have since observed that Sir William Petty, from his own investigations, came to a similar result.

† From the Subsidy Rolls of 51 Edw. III., 1377, laid before the Society of Antiquaries by Mr. Topham, and published in their seventh volume, Mr. Ghalmers calculated that England and Wales contained at the demise of Edward III. about 2,100,000 souls.—Chalm. Estimate, p. 13. He reasoned also that two hundred years afterward, in Elizabeth's reign, or about 1583, the people of England and Wales were between four and five millions, "though approaching nearer the last number than the first."—*Ib.* 35.

e population of England was estimated to be 8,175,000 rsons, we had only twice doubled our population. Our 000,000 in 1066 had taken above 700 years to become a le more than 8,000,000 in 1791. I do not find any au- ntic evidence that any country, either in Europe or else- ere, had in that period augmented its population in a larger io; nor do I know any nation more favourably circum- nced as to the chief causes of national prosperity. None ve outstripped us in the improvement, nor, I believe, sur- sed us in the progress of our population.*

It is obvious that the geometrical ratio has not been oper- ng in England for the last 1,000 years; and it is incredible at it was in existence here in the anterior periods, which re those of our wilder condition; England, therefore, gives torical contradiction to the Malthusian principle.

Descending into more recent periods, the disproof of it ntinues as decisively.

We find that in England and Wales, during sixty years, m 1700 to 1760, a highly-improving period of our annals, population increased only one fourth. This fact is a version of the Malthusian ratio, as the natural principle which population is determined; for, although the effect s local as to our island, yet it may be deemed a specimen at was then occurring elsewhere; for in no part of the ng world, in any age, can the actual laws of human popu- ion have had a freer or more favourable operation than in happy country from the accession of Queen Anne to

* In Mr. Rickman's valuable preface to his "Abstracts of the Popula- Returns," in digesting which he has displayed such remarkable as- uity and intelligence, he remarks; "The *best statement* which can given of the progressive population of England and Wales is here bjoined, on the authority of Mr. Finlaison, of the National Debt Of- e, taken in the middle of last year:—

1700	5,134,516
1710	5,066,337
1720	5,345,351
1730	5,687,993
1740	5,829,705
1750	6,039,684
1760	6,479,730"
	Popul. Abst., vi., p. xlv.
One fourth of	5,134,516
would be	1,283,629
	6,418,145

that of George III. All the natural causes of its increase were in unrestricted and even befriended action. Every social influence was on its side; and the national improvement and prosperity, and the long abstinence from foreign warfare which distinguished the reigns of the first two Georges, especially during Sir Robert Walpole's long administration, were auspicious to our human increase. Yet, although thus favoured, the natural laws of population, instead of twice doubling our numbers in this period, and of beginning their third duplication, as on the Malthusian theory they should have done, only added, at the end of the 60 years, one fourth more than the amount had been in the beginning of that century.

From the accession of George III. to that of his present majesty, William IV., an enlarging ratio began, increasing with the national greatness and prosperity. No country, as far as wealth, talent, industry, commerce, and enterprise, and the moral habits and domestic virtues, could advance a population, has been under circumstances more auspicious to its promotion than England and Wales were during the reign of George III. and that of his successor George IV., especially in the latter portion of it. Yet we learn, that in the SEVENTY years from 1760 to 1830, the population, instead of three times doubling itself, had but a little more than once doubled itself; and in the last sixty years from 1770 to 1830, when its increase was by far in the greatest ratio of multiplication, had not in 1830 doubled what it was in 1770;* are we not justified, with such an opposing experience as this, in refusing to believe that geometrical progression is the law of human population? This is so far from being the fact in Great Britain, that, instead of twenty-five years, it takes seventy years to double in.†

* Mr. Finlaison's account continued is—

1770	7,227,586
1780	7,814,827
1790	8,540,738
1800	9,187,176
1810	10,407,556
1820	11,957,565
1830	13,840,751

These numbers "include the army, navy, and merchant seamen."
Rick. Pop. Abst., vi., p. xlv.

† *Mr. Rickman* remarks, "The increase of population in Great Britain

Has this fancied law been predominating in Scotland? Certainly not; for in the thirty years preceding our last census, the most flourishing era of her history, and with all the causes of human improvement more active than before, her population, instead of more than doubling, had increased in 1831 by rather less than a moiety of what it had been when the present century commenced.* But comparing Scotland in 1820 with what it was in 1700, we find that it had only doubled once in 120 years.†

What has the law appeared to be in Ireland, which has been supposed to be peculiarly prolific in her young progeny? We find that, from 1712 to 1791, it had but just doubled itself in seventy-nine years;‡ and from that time, although the causes of human prosperity have been acting within her more strongly than ever, notwithstanding her local agitations, she had not doubled her population in the forty years which preceded her census in 1831.§

has not been materially accelerated or retarded since the year 1801, having been always about one and a half per cent per annum."—Pop. Abst., vol. i., p. 9.

* Mr. Rickman's Summary gives us these numbers:

1801	1,599,068
1811	1,805,688
1821	2,093,45
1831	2,365,114
	Pop. Abst., vol. i., Pref. l.
One half of	1,599,068
would be	799,534
	2,398,602

† Mr. MacCulloch states the numbers of these two periods thus:—

1700	1,050,000
1820	2,135,000

‡ Mr. J. B. Bryan, in his "Practical View," enumerates the following series of increase since the year 1700:—

1712	from Th. Dobbs	2,099,094
1718	ditto	2,169,048
1725	ditto	2,317,374
1726	ditto	2,309,106
1754	Hearth-money collection	2,372,634
1767	ditto	2,544,276
1777	ditto	2,690,556
1785	ditto	2,845,932
1791	ditto	4,206,612

Ritchie's Ireland, p. 110.

§ The census of 1831 exhibited the population to have advanced then to 7,767,401. The *double of the amount* in 1791 would have been, if it had taken place, 8,413,224. The last census, taken by the Special Commis-

Does France, in her augmentation, support the geometrical ratio? So far from it, that Mr. Mathieu infers that its population, at its present rate of increase, would require 111 years to double in. The comparison between its amount in 1801 and that of 1831 indicates that it would not advance so rapidly as even this slow increase, for it had only enlarged a little more than one seventh part in these thirty years.* This rate would take 200 years for a duplication instead of only the alleged twenty-five. Her separate departments display a similar slow augmentation, with some differences in the ratio.† Other countries, in the natural operation of their laws of population, discountenance the universality or predominance of any geometrical multiplication.‡ The largest increase is in

sioners in 1834, made the total population of Ireland then 7,943,940, not a double in forty-three years. They were thus distinguished:

Roman Catholics . .	6,427,712
Church of England . .	852,064
Presbyterians . .	642,356
Other Protestants . .	21,808

Hamilton's Abst. Rep., p. 180.

* The progress of France since 1801 may be thus enumerated:—

1801	28,216,254
1822	30,465,290
1827	31,845,428
1831	32,560,934

The first and last numbers are from Mr. Rickman, vol. i., p. 24, the two others from Fer.'s Bull. Univ., 1828, p. 17, 19.

28,216,254
one seventh 4,030,893

32,247,147

Thus the increase from 1801 to 1831 was rather more than one seventh.

† Thus the increase in the eighteen years between 1801 and 1818, in the department of L'Aisne, was 33,371 on 426,295, which was about one twelfth; and this rate would take 216 years to double in.—Bull. Univ., 1826, t. 7, p. 20.

In Haut Vienne the increase was one seventh in twenty years, from 1810 to 1829 inclusive.—Ib., 1831, p. 157. This rate would have doubled the numbers in 140 years; several departments then varied in their ratio, but none bringing the duplication in less than a century.

In the "Revue Encyclopedique" for 1823, the average increase in all France during 1827 was stated to be 6·36 in 1000, or about one in 150. This would require a century and a half before the whole French population would be doubled.

‡ In the Pays bas, or kingdom of the Netherlands, the population had increased in the six years from 1819 to 1825 from 5,642,552 to 5,992,666. M. Quetelet states this to be one seventy-fifth in each year.—Bull. Univ., 1827, p. 94. This rate would only double once in seventy-five years.

In the Prussian provinces on the Rhine the population in 1816 was 1,849,711, and in 1828, 2,172,546. This was an increase of 322,834 in

Russia; but, as I have before observed, she has been so frequently augmenting her territories, and therefore her population, by the addition of new provinces and tribes to her empire,* and also inviting and receiving new settlers from other countries,† that it is not safe to rest any calculation of the natural law upon her augmentations. All these instances, from so many countries in Europe, under circumstances very dissimilar to each other, but all existing in the most prosperous age that our world has known, and when population has been receiving impulses highly favourable to it from the general intelligence, improvement, activity, and increasing property and employment of all kinds, concur to indicate that the supposed law of the geometrical increase is not that general system under which our Creator has willed and causes his human race to multiply. It has been one of those mistaken deductions which captivate from their novelty, and claim attention by their plausibility, and are well meant by their supporters; but which, being too hastily made, from insufficient

twelve years.—Bull. Univ., 1830, p. 435; and would not double the amount for nearly seventy years.

In Guelderland the numbers in 1815 were 259,784, and in 1825 were 285,573.—Bull. Univ., 1827, p. 102. This ratio would require a century for its duplication.

Corsica, in the five years from 1822 to 1827, increased 4,731, or 180.348. This rate would not double till nearly 190 years.—Bull. Univ., 1828, p. 21, 95.

Denmark in nine years, from 1816 to 1825, advanced from 931,600 to 1,143,193.—Bull. Univ., 1829, p. 134. This rate would be above fifty years in doubling if it continued.

The kingdom of Naples in 1813 contained 5,822,303, and in 1834 only enlarged to 5,883,373. This augmetation would require ninety-five years for doubling.

In Palermo the population, according to Dr. Calcagni, was 156,876 in 1816, and in 1825 had become 167,505.—Bull. Univ., 1827, p. 121. This increase in nine years would not double the numbers in 140 years.

In Saxony the population in July, 1832, was 1,558,153, and in December, 1834, was 1,595,668, being an increase of one per cent. per annum. Seventy years would be requisite for its doubling at this ratio of increase. —Mr. Preston to Statistical Society.

At Frankfort the population had increased, in twelve years preceding 1829, during which 13,754 had been born, only 316, which was but a forty-third part.—Bull. Univ., 1831, p. 50. At this rate this city would not double its numbers in less than 300 or 400 years.

* See before, p. 57.

† Mr. Malthus thus mentions those foreign colonizers. He says of the Empress Catharine, "Her *immense importation* of German settlers not only contributed to people her state with free citizens instead of slaves, but to set an example of industry, and of modes of directing that industry, totally *unknown to the Russian peasants*."—Malthus on Pop., vol. i., p. 370.

materials, depart from the mind as soon as fuller and correct information, and the just reasoning on that, ad in society. We drop, then, our errors as naturally and a itably as we at first had conceived them.*

LETTER X.

A Rule suggested by which the Malthusian Ratio may be alway —Its Conditions have not occurred anywhere.—The more p Rate shown in the late Increases of our own Population.—In a similar Gradation.—Also in Prussia and Lithuania.

My dear Son,

As very important political systems and legislative ures have been recommended on the principle and th lief that the Malthusian ratio is the true law of popu I have endeavoured to find out some simple element by w I will not say its possibility, because that is not a states inquiry, but its probability, according to all known exper could be put to an arithmetical and applicable test. I not deceive myself, one has at last occurred to me, w will now mention. This is the rule, that no populatio where can double in twenty-five years, unless the birth for all that time, 65 in every 1000 of the people, an deaths all that while only 26. There must be a conti

* The English population in the year 1710 was, according to M laison, 5,134,516. Now supposing it to have been 2,000,000 at th man Conquest, a steady increase, at one twentieth in every gen at three twentieths in a century, would bring it very nearly to t certained amount; thus—

1066	2,000,000
1100	2,100,000
1200	2,431,012
1300	2,814,199
1400	3,252,785
1500	3,765,412
1600	4,358,934
1700	5,045,998

We here see that it was above 450 years before it doubled; country was continually increasing in its national improvemen prosperity, notwithstanding its civil and foreign wars.

surplus of the births above the deaths of every year of 39 in every 1000 for the whole period of twenty-five years, or the numbers will not double in that time. To express this rule in other words, we may say that the births must be, every year, for the twenty-five years, one in 15 5-13 of the whole population, or nearly one fifteenth, and the deaths all that time only one in 39, or nearly a thirty-ninth part of the population, making invariably the difference of two births and a half to one death, or 65 births in 1000 to 26 deaths. Whenever these conditions steadily occur for twenty-five years together, that population will be doubled in that time, but not under any other proportions. Now, if this be so, I would beg leave to ask those who may be inclined to support the geometrical ratio whether they have ever met with any authenticated document of such a proportion of births to the population, and of deaths to those births, as is above mentioned, for a continuity of twenty-five years, in any age or country of the world. I have found none myself. I do not believe it to be possible to adduce any. The births, nearly a fifteenth part of the population in every year, and always twice and a half the number of the annual deaths, for twenty-five years, will make a doubling in that time.* The principle may be expressed in another form, thus: to double any population in twenty-five years, there must, in each of these years, be born and live a one twenty-fifth portion of its whole numbers above those who shall annually die; a little less than one fifteenth part born, and than one thirty-ninth dying, every year, would be the nearest proportions to fulfil this rule. The fractional subtractions from these numbers would make the result exact. The practical laws of daily nature do not accomplish these conditions, as far as my inquiries have extended.

Our own population, for the last thirty years, is an instance of as steady a national increase as any that can be quoted. I

* We may try this rule by any number: suppose a population of 100,000; for these to double in 25 years, the rule would require 6500 to be born every year for 25 years successively, and 2600 only to die annually for that time; $6500 \times 25 = 162{,}500$ births; deduct for deaths $2600 \times 25 = 65{,}000$, the surplus from the births would be 97,500, or a surplus of 39 births on 1000 in every year; 3900×25 would also give 97,500.

So, if the births be calculated as one in 15 5-13 of the population, and the deaths as nearly one in 39 for 25 years, the result would be the addition of nearly 100,000 at the end of the 25 years.

am not aware that any has surpassed this augmentation fc greater continuity. This has caused a multiplication of ab one tenth in every ten years. Now, to do this, the regu result must be, that the births shall, on the average, during that time, be on the whole one half more than the deat One and a half births to one death will produce an increa of numbers like our own, and double the population in ab seventy-four years, if the relative progress never lessens ceases. But if either of these events takes place, if it any time diminishes or pauses, the people cannot be doub even in that length of time.*

But because England has in the last thirty years increa by one tenth, we are not therefore to infer that she has ways had such a rate of increase, or that this is the gene standard of nature in all times and in all ages; for this v not the case before. Instead of the births being always ab 100,000 beyond the deaths, as, with two exceptions, th were in each of the twenty-seven years after 1803, their s plus was not one third of that number in 1801, but began increase in the two following years.†

If we look at our population before 1800, in the seve years between 1700 and 1770, we find that, taking eight cennial periods of this interval, the burials were, at three

* That a steady increase of one tenth in every 10 years for 70 ye would in that time double the population, the following figures sho taking the population at 1000, this would be :—

1100	in the first	10 years
1210	at the end of	20
1331	at . . .	30
1464	at . . .	40
1600	at . . .	50
1760	at . . .	60
1936	at . . .	70

But an increase of one tenth in ten years would be an average augm tation of one hundredth every year. Calculate this in the same w and you will find that it will be doubled about the seventy-third ye But if the annual increase became diminished in any part of this k series, the time of doubling would be correspondently protracted.

† Our baptisms exceeded the burials in the first six years of this c tury by the following amounts :—

1801 . . .	32,595	1804 . . .	112,815
1802 . . .	73,948	1805 . . .	110,961
1803 . . .	90,360	1806 . . .	108,477

Calculated from Rickm. Pop. Abst.

them,* 1710, 1720, 1730, more than the baptisms; and although the latter showed that at five of these times the births exceeded the deaths, yet their surplus was so small, that out of 1,351,616 baptisms, the deaths came so close that not quite 90,000 had been born beyond those who died.† It was not until 1740, in these periods, that the surplus of births began again to exceed the deaths in a small degree. This had increased in the next period of 1750, still more in 1760, and a little more in 1770. But, after this year, such a new impulse was, as it were, suddenly given to the reproducing causes, that in the twenty years between 1780 and 1800, the baptisms exceeded the deaths by above a million.‡ The causes of increase were in this interval so unusually operative and effectual, and the abatement of declining appears so great, as to produce in these twenty years above thirteen times the surplus numbers which the seventy preceding years, according to these decennial calculations, had added to our population. But since 1800 the reproducing laws have acted with still larger efficacy, so as to make the augmentation of the last ten years amount to the addition of one tenth. The long continuity of such an increase as this has been very rare. Perhaps it can be found but very rarely anywhere else. In Rus-

* The numbers were—

	Baptisms.	Burials.
1700	152,540	132,728
1710	139,379	140,308
1720	155,060	160,424
1730	161,468	176,493
1740	168,957	166,973
1750	180,184	154,686
1760	187,068	155,687
1770	206,960	174,383

Pop. Ab., 1800.

† The excess of burials beyond baptisms in the above list in 1710, 1720, and 1730, was 21,318. The excess of baptisms above burials in the other five years was 111,252, leaving on these eight decennial years, out of the 1,351,616, which all these baptisms amount to, only 89,934; so that in these eight selected years the population increased no more than that number, or not quite one fifteenth part.

‡ The whole baptisms and burials, from 1780 to 1800, in England and Wales were—

Baptisms	5,084,494
Burials	3,904,162
More *baptisms*	1,180,332

Pop. Absl.

sia, the productive results have varied. In the eleven years after 1811 her births exceeded her deaths by about one third.* In the next year her deaths were more than her births,† but after that her nativities became more numerous than her burials. Yet her variations show the improbability of a country keeping up for twenty-five years successively that degree of superiority of births to deaths which a large, and quick, and lasting multiplication requires. Nothing of this sort is to be seen in the different enumerations of the Russian nation.‡ In

* From 1812 to 1822 inclusive in these eleven years the amount was—

Births	15,456,195
Deaths	10,085,395
	5,370,800

Making this increase by her surplus births in these eleven years.—Fer. Bull. Univ., 1827, p. 115.

† In 1813, a year of war, the deaths of Russia exceeded her births by 2740.—Ib., 115. At St. Petersburg, from 1813 to 1822, there was also in these ten years an excess of deaths.

The births were . .	80,265
The deaths	107,500

making 27,235 more dead than born.—Ib., 116.

‡ Thus the whole amount of her male was less in 1816 than they had been five years before.

Males in 1811 . . .	17,952,424
Males in 1816 . . .	17,029,783

Fer. Bull. Un., 1831, p. 184.

In 1833 and 1834, the births and deaths stood in these proportions:—

1833; Births . . .	Males . .	942,836	
	Females . .	902,209	
		1,845,045	
Deaths	Males . .	779,140	
	Females . .	706,151	
		1,485,291	
Excess of births		299,754	

St. Petersb. Journal, Jan., 1835.

In 1834 the excess was much larger:—

Births	Males . .	979,879	
	Females . .	928,801	
		1,908,678	
Deaths	Males . .	657,822	
	Females . .	635,176	
		1,292,998	
Excess of births		615,680	

no single year did the increase approach to the condition of our rule—that the excess of births should amount to a twenty-fifth part of the population. The highest difference recorded was not one third of the required number.*

We have a test of the Malthusian ratio, and an indication of nature's practical law of population, in the census of the births and deaths of the kingdom of Prussia and duchy of Lithuania for sixty-four years successively, from 1693 to 1756, inclusive, collected and published by Sussmilch.† In these sixty-four years, the births exceeded the deaths by only a little more than one fifth part of their own number, instead of being, as the geometrical ratio required, according to the rule I have stated, twice and a half the deaths. So that, in these sixty-four years, the births, although nearly one million and a half, only added to the population in all this time a few more than three hundred thousand.‡ This was the actual result; but in two of the earlier years, 1709, 1710, a pestilential disease took off about twelve times the usual number of the annual deaths.§ The fatal cholera, which has traversed over

* If Russia has now fifty millions of people, her annual surplus of births should be two millions for the doubling ratio.

† Mr. Sadler has printed these, from Sussmilch's German tables, in his 2d vol., p. 197–201.

‡ The births were—for

24 years	1693 to 1716	545,026
26 years	1717 to 1742	559,098
14 years	1743 to 1756	384,241
64		1,488,365

The deaths for the same years were—

10 years	1693 to 1702	147,180
6 years	1703 to 1708	98,583
Pestilence	1709	59,196
Ditto	1710	188,537
	1711	10,131
5 years	1712 to 1716	59,920
24 years		563,547
26 years	1717 to 1742	377,667
14 years	1743 to 1756	242,606
		1,183,820
More births than deaths		304,515
One fifth *of the births* would have been		297,873

§ *The two years of uncommon disease caused 247,733 to die, instead of about 20,000, nearly the annual* average of two other years.

most of the countries of both Asia and Europe in our times, shows that visitations of this nature should be taken into our consideration when we are investigating the natural laws of population, because they have been, in all ages, among the contingent but occurring elements of its real system and of its practical law. In various shapes this operation of disease has been made to attend all human societies at different periods. The morbific principle takes various forms. Plague, yellow fever, smallpox, sweating sickness, cholera, and other maladies have respectively been the fatal instruments of unusual deaths. But if we exclude the whole of this extraordinary mortality, the excess of births beyond the deaths, without it, will still be only one third of their number, and one twelfth of that third, in all the sixty-four years.* Whereas the rule we have suggested shows that, to accomplish the geometrical ratio, their surplus ought to have been twice and a half their amount in every twenty-five years. My final inference is, that the Malthusian law has never acted on human society, and is not the law on which Providence has founded it or by which he multiplies it.

By this standard the Malthusian theory may be always weighed, and will be always found wanting. We may say to those who befriend it, Search and adduce, if you can, a series of population for twenty-five years, in which the annual births have regularly exceeded the annual deaths by a twenty-fifth part of the whole nation, or that they have been continuously, for that period, two and a half times the deaths. Until such a series as this can be found, our disbelief of the geometrical increase will rest on a solid foundation.

As it is not the law by which the Divine wisdom has conducted, or still conducts, our national populations, no experience will thus verify it in his natural course of things. But as he always acts miraculously or supernaturally when it is a part of the plan to do so, I would have you keep in mind that he can accelerate and increase the agency of all his natural means and powers whenever he deems such miraculous effect to be fitting. He seems to have acted thus towards

* Deducting 227,733 for the pestilential deaths, this number would be reduced to 256,067, which would leave an excess of births of 532,278; *one third* would be 496,121, and one twelfth of that third added would *make 537,474.*

the Jewish people, after he had settled them in Egypt, until he was pleased to withdraw them from their slavery there, as he afterward sent them quails and manna by an extraordinary operation in the wilderness. But when he had completed their emancipation, he withdrew these extraordinary agencies, and left them under the course of his natural laws. He may have also made his laws of population more active than he intended they should afterward be in the first generations after the deluge. A lioness bearing four whelps at three years old, instead of one or two at the age of five, shows how easily the action of his natural laws may be increased even by natural means. How much more whenever he chooses to give them a special impulse!

But we must never mistake a natural possibility for a natural law. Some facts in my first volume showed what extraordinary powers of prolific vegetation sometimes appear in particular instances, indicating what the Creator might, if he chose, cause all our nutritious plants to exert.* But this supernatural fertility, though it proves that the vegetable kingdom is so framed that whenever necessary it can be urged to produce so astonishingly, is not that gereral and practical law of vegetation which he chooses at present to form and govern it. Extraordinary superfetations occur occasionally likewise in the animal classes, showing the same latent power, but by their rarity evincing how strongly this ability to produce is restrained and regulated. The same natural possibility of what is now a supernatural productibility, whenever it takes place, appears sometimes in the human race, proving by its very novelty that it is not the natural law;† such inci-

* See vol. i., lett. iv.

† Every year we hear of occasional instances of three or four children at a birth in our own metropolis. The late Shah of Persia is stated to have had by his wives above 50 children. But the most extraordinary produce from one wife is mentioned in the Russian Journal, "Severnaga Picheler." I give the facts as I read them; I have no other authority.

In 1775, Jacob Kirilo, a Russian, was the father of 57 children by one wife, all of whom were living. The wife had, four times, four children at a birth; seven times, three children; and ten times, twins. He married a second wife, who had once three children at a birth, and six times twins.

I find another Russian signalized for this uncommon fecundity, which I copy for you as I find it printed, without any further knowledge of its authenticity.

Fenol Wassillewitz, of Selija, had a first wife who lay in 27 times. Four times *she had four children*; seven times, three; sixteen times,

dents likewise marking to us, that, as such things may take place in human nature as well as in animals and vegetables, there must be a steady governing superintendence of population everywhere, which makes that moderate degree of offspring the universal result, which suits in each country its fitted and improving state, keeps the numbers and the food in a constant mutual adjustment, and has hitherto been so favourable to our social comfort and to national progression.

If the Malthusian ratio had been the created law of our multiplication, the world would have been overwhelmed with the immense masses of its population even before the Christian era had begun.*

twins. It is verified by official documents, that on 27th February, 1782, this man had had 87 children, of whom 83 were then living.—Standard, 23d Jan., 1834.

I have no means of verifying these statements or of disproving them, but I may remark, that all these cases show that the possible is not the natural. The possible may happen and may not; and when it goes beyond the natural, is exceedingly rare. But the natural is the common event, and is so continually occurring as to mark itself to be the ordinary and the established law, with which the ultra possible should never be confounded.

* An easy calculation will show that the population of the world has never been conducted or permitted to occur upon the geometrical ratio; for if it had we might say, almost without a hyperbole, not merely that the producible food would not have sustained the marvellous amount of the generations that would have been born, but that the surface of the earth would have hardly contained them.

At the cessation of the deluge there were six parents for the renewal of mankind.

Now, supposing that, by the Malthusian law, there was a regular doubling every 25 years, observe the enormous figures that soon arise. The deluge occurred in the 1656th year of the world.

A. M.	PERSONS.	A. M.	PERSONS.
1656	6	2031	196,608
1681	12	2056	393,216
1706	24	2081	786,432
1731	48	2106	1,572,864
1756	96	2131	3,145,728
1781	192	2156	6,291,456
1806	384	2181	12,582,912
1831	768	2206	25,165,824
1856	1,536	2231	50,331,648
1881	3,072	2256	100,663,296
1906	6,144	2281	201,326,592
1931	12,288	2306	402,653,184
1956	24,576	2331	805,306,368
1981	49,152	2356	1,610,612,736
2006	98,304	2381	3,221,225,472

A. M.	PERSONS.	A. M.	PERSONS.
2406 . .	6,442,450,944	2631 .	3,298,534,883,328
2431 . .	12,884,901,888	2656 .	6,597,069,766,656
2456 . .	25,769,803,776	2681 .	13,194,139,533,312
2481 . .	51,539,607,552	2706 .	26,388,279,066,624
2506 . .	103,079,215,104	2731 .	52,776,558,133,248
2531 . .	206,158,430,208	2756 .	105,553,116,266,496
2556 . .	412,316,860,416	2781 .	211,106,232,532,992
2581 . .	824,633,720,832	2806 .	422,212,465,065,984
2606 .	1,649,267,441,664		

We have not yet reached the TROJAN WAR, which is placed in the 0th year of the world, and yet by this time, on the Malthusian ratio, population of mankind would have amounted to four hundred and enty-two billions, two hundred and twelve thousand four hundred d sixty-five millions, sixty-five thousand, nine hundred and eighty-ir persons.

If we carry on the computation to the accession of Solomon in 1014, in the 2990th year of the world, the numbers would run on in the lowing multiplication :—

A. M	PERSONS.
2831 . . .	844,424,930,131,968
2856 . . .	1,688,849,860,263,936
2881 . . .	3,377,699,720,527,872
2906 . . .	6,755,399,441,055,744
2931 . . .	13,510,798,882,111,488
2956 . . .	27,021,597,764,222,976
2981 . . .	54,043,195,528,445,952

These last figures present to us the enormous number to which the man race, on the earth, nine years before the accession of Solomon, uld have amounted if they had continuously doubled every 25 years. Such a result is a demonstration that no such law has ever been established in human nature; because nothing like even a millionth part such a quantity has been produced in our world.

No such law has therefore peopled it, nor any law of population in smallest degree approaching to it.

For if the law had been that population should double *once* in 60 years y, it would have caused the population of the earth at eight years be- e our Saviour's birth, to be 3,274,985,472 persons. The 60 years' du- ation would have made mankind in 802, the time of our Egbert and ariemagne, no fewer than 40,243,021,479,936 persons.

Nay, if the doubling had been *once* in *every century* only, the popula- n of the world, even under this law of duplication every hundred ars, would, at the accession of George III., or in 1760, have exceeded 945,138,660,498,432 persons: for this number would have evolved, at s protracted ratio, by the year 1752; and yet all the inhabitants at that e on the globe were not the fifty millionth part of this amount, even we suppose that there were then one thousand millions living on the rth.

These calculations prove that the doubling of mankind, by any fixed w or ratio whatever, is no part of the plan or operation of our crea- n; but that the human population is guided and governed by the ine will, with specific laws adapted to his purposes, and that it is ways, in every age and nation, acted upon and subjected to such ws as are *most suited to it*, and as tend to produce, alter, or continue

LETTER XI.

The Populations of the World are all in different States, u different Laws acting in each.—The three Elements of . are Marriages, Births, and Deaths.—All linked and adjus other in the Plan and System of Creation.—On the Rat riages, and of Married and Marriageable Females in vari lations.

My dear Son,

Let us now endeavour to trace the real laws by v Creator and Preserver carries on, guides, and mo various populations of human society.

As we cast our eyes around in the world, we see are everywhere existing in different states—in different in all their circumstances and results, same laws of population cannot be equally affectin because, as the same effects do not occur in every c the same causes cannot be producing them.

Society appears to have been always in this d condition. Our first conclusion, therefore, is, th same laws cannot occasion dissimilar results, the law state of population are peculiar to that state, act in that state lasts, and alter into others as the conditi society changes. The human body is an instance of tation. The laws of its childhood act while that las of its youth then take their place, which are succ those of manhood, which again give place to thos age, if the individual lasts so long, till the law comes on, and terminates the action of all the law Thus it is with the population of mankind. The la in the savage state, operate while that condition la as that gradually changes into the civilized form c life, the laws of population alter into those which h appointed to act in the newer state of the improving

The same changes occur in material things. The nature, which are in full action in an uncleared cou

its existing state; and that it never will be suffered to be *what it ought* not to be.

not those which prevail in it when its forests have been removed and its soil is in careful cultivation. This is palpable to our sight. The laws of nature, in marshy ground, cease and disappear as soon as it is drained. Those which inflicted the fever and the ague are acting no more, while those of salubrity and of nutritious vegetation occupy their place. The analogy runs through all the stages of population. Each of the zones has its several laws and several results. The laws of life and death are always essential parts of the laws of population; and, therefore, however desirous we may be to search out for one general law, we shall see sufficient reasons to perceive that populations will always be governed by the laws of their place, age, and condition. No general law supersedes or nullifies these; but these are the real operating agencies, to which our attention should, in every instance, be turned.

There are, indeed, some universal facts connected with population which may be referred to a settled anterior plan and to fixed universal laws, everywhere operating to produce them; such as the following:—Population arises only from the parental association, and always from the mother; and none can be mothers before or after particular ages. All begin life at first as babes; and these are born in that wonderful equality between the sexes which alone is sufficient to mark a planned and directing government of human nativities. To these we may add the laws, as unceasing, that all who are born shall die, and that all shall not die at the same age, but at every diversity of duration, from one hour to one hundred years. We also find it a general rule or law, that though every male may be in time a father, and every female, in due age, for a limited time, be a mother, yet all men and women do not become parents; nor does every mother that has children introduce into society the same number of them, nor is able to rear up to maturity all or the same proportion of those whom she nurtures. These circumstances are of such perpetual ubiquity, that we may call them effects of laws, operating everywhere, which have been specially appointed to produce them. To general laws of this sort, and to a few more of this kind, population is everywhere subjected; but beyond all such, the laws of it become limited, local, and particular laws, and never such a one overruling or overwhelming law as the Malthusian theory supposes. This, indeed, has a

proof of its being imaginary, in the circumstance that it has never had such a universal individual operation as it ought to have had if it had been a universal law; for every woman does not produce children in a geometrical ratio, as she ought to have done if that were a real law in nature, or in any other fixed or invariable ratio. The laws of nature are constant in their agency, and are not partial or capricious in their effects; for, whenever the effects are of this character, they indicate that no one law can be producing them.

An average is not a law. An average result is an artificial deduction from many different effects; and many different effects imply, by their differences, that they are not the consequences of one universal law; for that, in the same locality, and under the same surrounding circumstances, ought never to vary in its operations and productions. That all births shall be from women, and that women shall always be nearly one moiety of mankind, and such like events, are constant effects, marking, by their uniformity of occurrence, that they arise from fixed laws of universal force and agency. But I do not perceive one acting law of population on this character. On the contrary, the state of it, and the individual effects which constitute that state, are so varying as to imply that many causes are in operation to produce them; that their agency is complicated, though never confused, and that the results are everywhere the particular effects of many means; while the harmonies, and adaptations, and utilities which they display are continual evidences that both the causes and the consequences are under a moral and intelligent government and adjustment of a provident wisdom and a benevolent care.

The state of every population is the complicated result of the combination and operation of three main elements, which are inseparable from it, and have always accompanied and composed it. These are MARRIAGES, BIRTHS, and DEATHS. All these are naturally linked together, and cannot be severed. All that are born are born to die; and none can be born without the connubial association. It is a verbal distinction that misleads to call one of these the law and another the check. Each has its appropriated laws, and works out by them its appropriated and independent effects, each equally important to the other. The laws of death are of their own kind, quite *distinct* from those of birth, but as powerful and unceasing, *and ordained* to be their perpetual attendant. The laws of

birth are of a dissimilar nature, and confined to the production of human life. They have no connexion with those of death, but are of their own peculiar and independent character. The laws of the union which occasions births, and by them leads to death, and provides in them the subjects on which the laws of death have to operate, are, in their turn, unlike either of the other laws, and arise from and depend upon events and circumstances not resembling those of either birth or death. The laws of marriage are therefore as peculiar and independent as any other law of nature is. Marriage and birth may as well be called the checks to death, as death the check to birth. All are the results of separate laws of nature, and their laws are of equal importance, both in magnitude and agency. All are alike fundamental and indispensable.

The state, increase, and decline of every population are always the joint effects of the concurring agencies of all the three laws; all these co-operate to produce the elements, agencies, and materials from which it arises. It is their blended action which causes it to be as it appears, and is ever making the living results of which it is successively composed.

We will briefly consider each of these elements, beginning with that of MARRIAGE.

The desire of marriage may be deemed universal, but the results of that desire are not so, because all do not marry; nor are the consequences of marriage either universal or uniform, because all that marry do not have children; and those who have issue have them with a diversity in number and in vital durability which is not at their command, but which takes place independent of their will and choice, and very frequently at variance with these. The connubial association is, therefore, manifestly under no single law, but is under the influence, and control, and deciding operation of several other laws or causes, co-operating with the desire, or opposing it, and subjecting it to these more powerful regulations.

The variable operation of the law which occasions marriages is strikingly shown by the varying effects in the different localities of the same country, and in different years in the same locality, as well as on the different individuals who prefer or decide to marry or to live single. Of the three elements, it is the only one which is left to human choice. The laws of nature as to births *and deaths* take their own course, and

exert their effects without the least reference to human wishes, and without, in the smallest degree, consulting them. But the laws of marriage are made subordinate to individual choice and determination. Every one who marries may or may not marry, as they please; but all must be born and die, whether they will or no. The laws of marriage have been therefore directed principally to act on the human will. The inclination to it is placed in the constitution of all. That is one of its natural laws. The possibility of it is given to every one; but, beyond that, many other laws concerning it have been ordained to be everywhere in operation. I have neither time, space, nor ability to trace and enumerate all the laws that govern marriage here; I can only mark their diversity of operation, and some of the positive limitations to which Providence has irresistibly subjected them.

If there be any one law of nature concerning marriage, it may be said to be that there shall be no one commanding law about it beyond that of the general wish. The ordainment appears to be that it shall be left always to human will, and left most generally to the free will of the individuals themselves, to modify, indulge, or restrain their natural inclination, as each finds to be most conducive at the time to his or her individual interest or comfort. Perhaps another experienced fact might be placed almost in the rank of a general law on this subject, and this is, that every particular marriage shall depend more on the choice and determination of the male sex than on that of the female. The male is everywhere the proposer of the union, because he is the sovereign and the master of this world. It is the acquiescence or the refusal which has been attached to the female choice and determination.

The variations of human choice on this interesting subject, and the consequent diversities of the proportion and number of marriages generally in the world, may be perceived by what has occurred in our own country concerning them. Here we shall find that marriages fluctuate every year very much, both in number and in their proportion to the existing population. The registered marriages in England and Wales, from 1800 to 1830, were in no year alike.* Nor was the

* Mr. Rickman's accurate table thus states these marriages:—

1801	67,288	1804	85,738
1802	90,396	1805	79,586
1803	94,379	1806	80,754

difference always that of a gradual augmentation as the people increased; but sometimes lessening as they were more numerous.* The largest amount was in the year 1828; but this diminished by nearly 7000 in the next succeeding year, and was not equalled in that which followed.† Yet, compared in its decennial periods, there was always a steady advance, corresponding with the multiplied population.‡ So, notwithstanding these annual variations, yet on a medium average of every five of these years, the amount was also found to show that, on the whole, during this space of time, there were always more marriages as there were more people.§ This is such a natural result that we cannot doubt it to be universal.

1807	83,923	1819	95,571
1808	82,248	1820	96,833
1809	83,369	1821	100,868
1810	84,470	1822	98,878
1811	86,389	1823	101,918
1812	82,066	1824	104,723
1813	83,860	1825	110,428
1814	92,804	1826	104,941
1815	99,944	1827	107,130
1816	91,946	1828	111,174
1817	88,234	1829	104,316
1818	92,779	1830	107,719

Popul. Gr. Brit., vol. i., p. xxx.

* Thus, in the twelfth year, when the numbers of the people had been enlarged by the addition of more than a tenth, there were above 8000 fewer marriages than in the second year; for they were, in 1812, 82,066 only, when in 1802, 90,386. So the seventeenth year was 11,700 less than the fifteenth. They were, in 1817, 88,234; and had been, in 1815, 99,944.

† 1828, 111,174; 1829, 104,316; 1830, 107,719.—Ib. The latter still 3455 short of the earlier year.

‡ 1800 9,187,176
1810 10,407,556
1820 11,957,565
1830 13,840,751

Rickm. Popul., ib., xlv.

§ Thus the marriages were—

From 1801 to 1805 . . . 83,465
1806 to 1810 . . . 82,953
1811 to 1815 . . . 89,012
1816 to 1820 . . . 93,073
1821 to 1826 . . . 103,363
1826 to 1830 . . . 107,056

Rickman, xxxiv.

The exception occurred between 1806 and 1810, when, instead of there being more marriages than in the five preceding years, there were 512 fewer; but in each of the four next quinquennial periods there was a gradual augmentation, *though not in the same degree*; for the increase

Yet still the practice of mankind differs very much in the amount and proportions of their matrimonial unions. Mr. Rickman's calculations have ascertained that the average of all the marriages in England and Wales, during the last five years of our latest census, was, that one had taken place for every 128 persons in the population.* In each year two persons out of this number had united themselves together.† But, on looking into each of the counties of England, we find that the wedding disposition greatly varied; and by all the proportionate numbers between 103 as in Middlesex, and 175 in Hertfordshire. Scarcely any of the counties were alike in their proportions.‡ Nor do the dissimilarities seem referable to geographical or statistical causes, so much as to indi-

during the five years from 1821 to 1825 was at the rate of 10,000 beyond the preceding term, while in that and in the subsequent one the advance was about 4000 only.

* The annual proportion of marriages to the population during the last five years preceding 1831 was one to 128 in England.—Rickman, ib., p. xxxiv.

† Mr. Rickman has given a corrected table of the annual proportion of all the marriages to the population of England in the several counties between the years 1796 and 1800, between 1806 and 1810, between 1816 and 1820, and between 1826 and 1830, separately enumerating them, p. xxxii.

‡ The proportion between 1826 and 1830 may be classed according to their numbers, thus:—

Middlesex	. .	103	Rutland	. . .	137
Lancaster	. .	115	Suffolk	. . .	137
Gloucester	. .	117	Durham	. . .	138
York, East Riding	.	118	Chester	. . .	139
York City and Ainsty		113	Norfolk	. . .	139
Warwick	. . .	120	Salop	. . .	140
Nottingham	. .	122	Bucks	. . .	140
Cambridge	. .	123	Dorset	. . .	140
Stafford	. . .	126	Oxford	. . .	141
Leicester	. .	127	Sussex	. . .	142
Worcester	. .	127	Kent	. . .	142
Surrey	. . .	129	York, North Riding	.	144
Bedford	. . .	129	Cornwall	. . .	147
York West Riding	.	131	Somerset	. . .	147
Southampton	. .	131	Wilts	. . .	148
Monmouth	. .	131	Berks	. . .	149
Huntingdon	. .	131	Hereford	. . .	152
Devon	. . .	132	Westmoreland	. .	152
Lincoln	. . .	134	Essex	. . .	154
Northumberland	.	134	Cumberland	. .	163
Derby	. . .	135	Hertford	. . .	175
Northampton	. .	135			

Rickm., xxxii.

The comparative proportions in each of the other three periods of five years differ from these and from each other in nearly every county.

vidual choice and will. Even the average of weddings, taken at every five years, differed likewise in their several ratios.*

If we extend our view to other countries, we find similar inequalities in the proportions, and yet greater approximation in the general results. In France, in 1827, the annual marriages for all France were calculated to be one in 138, but varying in its eighty-six departments from 1 in 109 in the Seine department, to 1 in 198 in that of La Manche.† The average for seventeen years in France was 1 in 131.‡ In Savoy the ratio differed from 1 in 110 to 1 in 142.§ In Denmark it varied from 1 in 123 to 1 in 128;‖ and in the Netherlands, from the largest number of 1 in 90 in the Province of Limberg, to the smallest quantity, or 1 in 165 in East Flanders.¶

* The comparative average of the proportions of the whole, in all the counties taken together, was as one to 123 between 1796 and 1800; one to 121 between 1806 and 1810; and one to 127 between 1816 and 1820. Monmouthshire had fewest marriages in the first five years, being only one in 169; and Middlesex so many as one in 95; and, in the next five years, one in 94.—Rickm., ib.

† The "Revue Encyclopedique" states these results from the Ordonnance Rendue:—

Seine, including Paris,	9·20 in 1000, or 1 in 109.	
13 departments, between	8·81	and 8·02.
34 ditto .	"	7·87 and 7·00.
29 ditto .	"	6·99 and 6·10.
10 ditto .	"	5·98 and 5·05.

The last number, the smallest, was the department of La Manche, where 1 in 198 only had married.—Bull. Univ., 1828, p. 17.

‡ From 1817 to 1833.—Mr. Porter's Essay for the Statist. Society.

§ Upon an average of forty years, ending 1819, in the Alpine regions it was 110; in the lower districts, 142; but in the middle regions, between these and the mountains, it was 1 in 118.—Bull. Univ., 1831, p. 256.

‖ Mr. Porter thus noticed it to the Statistical Society:—

1796 to 1800 . . .	1 in 123
1806 to 1810 . . .	1 in 121
1816 to 1820 . . .	1 in 127
1826 to 1830 . . .	1 in 128

¶ The differences in the provinces of the Netherlands are thus stated:—

Zealand . .	114	West Flanders . .	138
North Holland . .	104	East ditto . .	165
South ditto . .	113	Antwerp . . .	143
Utrecht . . .	118	Hainault . . .	136
Overyssell . .	122	Liege . . .	154
Frise . . .	129	Limburg . . .	90
Groningen . .	149	Luxemberg . .	150
Guelder . . .	131	Namur . . .	151
South Brabant .	142	Drenck . . .	130
North ditto . .	150		

Sadler, vol. ii., p. 440.

The diversity is as great elsewhere.* Of all these mentioned proportions, the two extreme limits seem to be 1 in 90 and 1 in 175.

Our own average proportion of 1 in 128 may be taken as the most general medium of the number of annual marriages in a very prosperous and civilized community; but at this rate, only one fourth of the whole population would have married in thirty-two years: and if every marriage had an average of four births, which we shall see in our next letter to be a fair general medium, all these marriages would produce no more than would be sufficient to replace the departing generation, without adding to it; and if we allow a generation to last, on the whole, for thirty-three years, the addition would be but a hundred and twenty-eighth part. Hence, with such a ratio of marriages, it is impossible that the geometrical ratio should occur.

But while the proportion of marriages in every country, and in every part of a country, is left to the arbitrary will of the one sex to propose and the other to acccpt, and to all the variations which occur from the differences and fluctuations of individual inclinations or decisions, yet there are obvious limits in the practical exercise or effect of these determinations. These limits appear in the two extremes of the proportions in which marriages take place, which I have just noticed as the greatest and the smallest of those I have referred to. I cannot state, with decisive precision, what the very lowest and highest of these two extreme numbers are; but I can say that I have not found marriages anywhere to be in number so great as 1 in 80 of a community, nor so few as 1 in 190 anywhere. These great extremes rarely occur. The more usual proportion seems to be, that from 1 in 100 to 1 in 140 of most civilized populations annually enter into this state. The most numerous proportion, you will observe, does not approach the possibility of producing the geometrical ratio, and therefore the quantity of marriages in any country need never alarm us into any discouragement of them.

But there is one decisive limitation to marriages, universally produced and universally maintained, by an unvarying law of nature, specially appropriated to this subject, and fixed

* Thus, in Iceland, 1 in 123; in Russia, 1 in 126.—2 Sadler, 66. In Sweden, 1 in 112; in Norway, 1 in 130; and in the Pays de Vaud, 1 in 140.

in the human frame at its primeval creation. Its arithmetical elements in the antediluvian world have not been recorded. But, from the renewal of mankind after the deluge, they have been found everywhere to prevail with sufficient uniformity to be received as general certainty.

This limitation is, that the maternal period of the female sex shall be, in every one of them, only for a portion of her life. The beginning year and the ending year of this vary with the climate; but the duration of it is very similar; and we may take thirty years as the average of its general continuity. The natural possibility of becoming mothers lasts, in our regions, from fifteen to forty-five years of age. In the eastern and more tropical countries, it commences and terminates sooner. But the ages above mentioned may be considered as the ordinary limits of the maternal state. Consequently, the increase of the population anywhere can never be greater than such as that proportion of its females allows who are between these ages. Let us, then, first consider what portion of women in a society are usually in this period of their life.

In North America we find, from the census taken at four decennial periods, that in 1800 above three eighths of the females were between 15 and 45;* and nearly so in 1810.† Rather more than the same proportion appeared in 1820.‡ In 1830 the census table, stating the ages, gives them in a different division, and makes no distinction between 40 and 50. I cannot pursue the exact comparison there,§ but the three preceding proportions will be sufficient to reason upon. These three eighths of all the American women have had to reproduce a new generation of as many as themselves, as the other five eighths of their own sex and as all the male popula-

* The white population of 1800 were found to contain 2,115,431 females; of these, the females of 16 and under 45 were 802,760; three eighths of the whole females would be 793,287.

† The female whites in 1810 were 2,873,950; and of these, 1,105,824 were the females of 16 and under 45; three eighths would have been 1,077,732.

‡ In 1820 the white females were 3,866,657; of these, 1,517,971 were of 16 and under 45; three eighths of the whole would be 1,449,996.

§ The white population of 1830 contained 5,167,299 females; of whom those of 15 and under 40 were 2,068,940, or two fifths; for two fifths of all the females would have been 2,066,918. Those of 40 and under 50 were 355,425 more. Taking half of these for 45, the number of 15 and under 45, so reckoned, would be 2,246,652, or less than four ninths of all, as that proportion would be 2,296,579.

tion. We can reduce all these to precise numbers, when we do so we find that every American woman tween 16 and 45 must produce 4 1-4 children, in order tc place the existing population and to prevent its decli Thus, if every American woman who could have chil were to have 4 1-4, they would only keep up the populat but not at all enlarge it. I take America as the stron case that can be adduced on the subject, and also as the which the numbers have been so distinguished as to afford elements of an exact calculation.†

Let us see next what a country in the Old World, on German continent, exhibits on this subject. I will Saxony in 1834. Her census has not given the num from 16 to 45, but it has noted them from 19 to 50, w we will take as the nearest substitute. Here we find the same population could not be maintained, even witl any increase, unless every woman between 19 and 50 upon the average, 4 1-2 children; but, as a large part of tl would not be in wedlock, each of those who were must l many more than 4 1-2 each in order only to replace.‡ T

* The whole white population of 1800 of both sexes amounted to	4,30
Deducting from this	80
Leaves	3,49

as the number of all in the community who were not females bet 16 and 45; this number is about 4 1-4 times the 809,760. A simil sult will be found from the amount of the other years, as stated i preceding notes.

† In the state of New-York the census in 1825 returned the p lation as 1,616,438, consisting of 822,897 males and 793,561 fem Of these females 361,624 were under 16, and of those above 1(married were 200,481, and the unmarried 135,291. Thus the we females were but one eighth of the whole population, and nearl fourth of their own sex. In this proportion, those actually ma could not replace themselves and the rest of the community w each, upon an average of the whole, had eight children.

‡ The whole population of Saxony on the 1st December, 1834, 1,595,663, or 775,244 males and 820,424 females. The number of fen between 19 and 50 are thus stated:—

19 to 21	28,873
21 to 30	124,457
30 to 40	110,192
40 to 50	87,780
	351,302

4 1-2 to each of these would produce 1,580,859, being nearly 1 short of the actual population.

the results both in North America and Saxony seem to approximate in this respect.

What facts have we on these points in our own country? Here I do not find a table of the female ages between 16 and 45. But Mr. Rickman has made one, with divisions, for the year 1821, that will enable us to take, as the nearest substitutes, either 15 to 40, or 20 to 50. Let us inquire into the results of both. The results will be found to be, that every woman between 15 and 40 must have above 5 children to replace the existing population; or every woman between 20 and 50 must, on the average, be mother to 5 1-7.* Yet as a considerable portion of these would not be in the wedded state, the existing numbers could not be kept up, unless the actually married had each as many as the American and Saxon enumerations required.

These three instances, so distinct in locality from each other, are such fair and sufficient specimens of the general process and course of the renewal of population, that it is not necessary to inquire for similar results elsewhere. These prove the impossibility of a geometrical population, and show by what gradual degrees all national multiplications must take place, and lead us to infer how much more likely population is to keep stationary or to lessen, than to make any great advances. Nature forbids the too rapid increase by her two laws—that females only shall give the new generations to society, and that only a peculiar portion of these shall, from the ages required, ever be the producing mothers.

Our next point of inquiry may be, what portion of the population of a country is usually living in the married state; and the most common rate at which we can generally estimate this appears to be about one third. In some nations there are more than one third who are married, as in Spain† and

* The whole population in England and Wales in 1821 was 10,530,671, comprising 5,151,052 males and 5,379,619 females. Those of the latter between 15 and 50 are thus stated:—

15 to 19	535,569
20 to 29	901,338
30 to 39	649,507
40 to 49	500,997

1 Rick., xxxvii.

Of these, the 15 to 39 inclusive are 2,086,414, and those from 20 to 49 are 1,951,842.

† La Borde stated the population of Spain in 1802 to be 10,409,879; and that of these 3,890,661 *were married*; and of the unmarried then,

Saxony.* In others, rather less than one third, as in the Rhine provinces of Prussia ;† in a French department‡ and a Netherland province ;§ and still less in New-York state.‖ Thus, as a general average, we may calculate that about one third of the whole are always living in the united state. This appears to have been the case pretty nearly in England for the last 30 years ;¶ and when this is the proportion, then one sixth of the contemporary population are in the condition of becoming mothers ; and this one sixth must be the reproducers of the

3,257,022 were males and 3,262,196 were females. One third of the whole people would have been 3,469,959 ; so that the married were a little above 3 1-3.

* In December, 1834, out of the Saxon population of 1,505,668 there were 566,837 married and 1,028,831 unmarried. The one third of all would have been 531,837.

† In 1828 the population of the Prussian provinces on the Rhine was 2,172,545. The married couples were 696,220 persons. The one third would have been 724,181. The department of L'Aisne in France in 1818, had 184,214 married persons out of a population of 459,666—Bull. Univ., 1826, p. 20. One third would have been 153,222.

‡ In the department Du Doubs in 1826 the population was 254,314; and the married of these were 82,871.—Bull. Univ., 1831, p. 330. The one third would have been 84,771.

§ Guelderland in 1824 contained 283,407 people ; of whom 89,208 were then married.—Bull. Univ., 1827, p. 101. One third would have been 94,469.

‖ In the New-York state, as before mentioned, the numbers of all were 1,616,458 ; and the married were, of course, twice the married women, or 400,962, which is not one fourth of the whole. So that, in this flourishing province of the United States, men do not marry so much or so soon as elsewhere.

¶ The standing marriages, if doubled, furnish us with the amount of the married population in every year, as thus calculated on Mr. Sadler's list of them in England, vol. ii., p. 240. The marriages of the year not being included and compared with the population at the time, they exhibit to us these numbers :—

	MARRIED.	POPULATION.
1781	2,457,444	7,473,000
1791	2,635,972	8,175,000
1801	2,850,554	8,331,434
1811	3,270,816	9,551,888

Sadl., 240.

The exact one third of the English population in each of these years would have been :—

1781	2,491,000
1791	2,725,000
1801	2,777,144
1811	3,183,962

So that the married, in England, at each of these periods, were about one third of the inhabitants, or rather less than one third in the two first *ten years ;* rather more in the two last.

new generation.* Consequently, to do so every wedded female must, on the average, produce 6 children, in order to keep up the population to its existing number, and more than 6 before this can be augmented. This is a large average, and another circumstance hostile to the possibility of a geometrical multiplication, and indicative of the moderate ratio at which population increases, according to the natural laws of birth, and to the ordinary habit of marriage unions. It leads us to infer, likewise, that population has been much oftener stationary than multiplying in the successive ages of the world.

These limitations show that our system has been formed upon a careful plan as to this great point of our population. Limitation implies and indicates regulation; for when natural agencies and their effects arise from specific construction, who is it that limits them but the constructer? and why should he do so but for some purpose and according to some plan? A regular and continued limitation is a mark of a definite design and of an end steadily pursued. The existence of such a fact assures us of the superintending attention of our Creator to the subject so guarded; and we may therefore be confident, that whether our populations increase or decline, the elements and laws by which either event ensues are always obeying the direction of his guardian benevolence. We may always leave the issue unfearingly to his disposal.†

*Mr. Sadler remarks that the mean amount of the population of England, as made by Mr. Rickman for the three periods of 1801, 1811, and 1821, is 9,9~8,666; and the total amount of the marriages of the whole term is 1,650,576.—Sadler, Law of Popul., vol. ii., p. 120. Now one sixth of the mean of the population for that time is 1,664,929; so that very nearly one sixth of the living population married in the 20 years from 1801 to 1821.

† On the subject of the marriages, I have endeavoured to trace out some rules concerning them, and will add what has occurred to me in my arithmetical calculations.

If marriages are 1 in 100, and continue to be in that proportion for 33 1-3 years, which may be taken as the average duration of a generation, then, in the course of that series of years, at that ratio, one third of the population will have married, and this portion or number will have all the births of the society among them.

The actually married, in the course of a generation, may be considered to amount to 33 1-3 times the annual number.

We may then deduce as a rule, that according as the proportion of marriages is more or less than 1 in 100, so less or more than one third of the population are in the married state.

When the ratio *is 1 in 90, more than* one third are married; more, by

LETTER XII.

On the Proportion of Births to Marriages.—The Variation in Differ Countries.—The established Limits to these and usual Laws.

My dear Sydney,

The proportion of Births to marriages will be always o of the chief laws of human population, because, as they mu arise from the connubial associations, and are always pursu by the laws of death, they are limited by our natural syste both in their origin and in their departure, and must therefo be duly adjusted to them.

More cannot arise than the marriages allow—more cann be at any time on the earth than the local, natural, and tem porary laws of death permit, in every district. Thus co fined in number, on either side, by causes over which th have no control, the continuance, as well as the increase the human race, will depend principally on the comparati ratio of the nativities to the wedlock of the parents of t community.

From this glance at the real state of this subject, yo reason will perceive that the births of the human race, every country, require the adjusting and providing care, n only at the commencement of the creation, but always afte ward. The adapting government must not cease as long the human race are to continue here under their present sy tem of being. To make continued care on this point u necessary might have been easily effected by establishing as a universal and invariable law, that every woman, in h years of marriage, should everywhere, invariably, have t same number of children; and consequently, that eve marriage should always have one ratio of births, proportion

one tenth of the one third. When the ratio is, as in England, 1 in 1 then less than one third are married; less by the difference of a hundr and twenty-eighth part to a hundredth part.

The births, if known, multiplied by their proportion to the marri population, will give the number of these; and this number, multipli by their ratio to the population, will, of course, show the whole numb of the community.

When the documents are not complete in all the elements, these rul *may assist* the calculations from them.

to the years of its duration. But this fixity of number and ratio has been universally avoided. It is one of the laws of Providence on this subject, that every woman and every marriage shall not have an equality of offspring. The annual number of human births and their proportion to marriages are never uniform; not only as between country and country, but as between one part of the same country and another portion of it, and also as between individuals. There is nothing like a settled and unalterable ratio in this respect anywhere.

From this established diversity, deep seated in the very constitution of human nature, the inferences may allowably be drawn, that the Creator did not mean to make his future attention and superintendence unnecessary; and that, so far from fixing a geometrical or any tyrant ratio over a subject so dearly concerning individual as well as social comfort, he has purposely left this in a free and floating state, unsubjected to any compulsive necessity, in order that he might always shape and modify it, as his plans should require, as to each community at large, and as his personal providence and administration as to every one's domestic life should deem it to be individually expedient.

The proportions of births to marriages continually and universally differ. I will select a few instances from authentic registrations to show this remarkable circumstance.

The variations in human births fully appear in those of our own island. During the thirty years preceding our last census, they were never in the same annual amount, nor always in a steady progression with the increase of the population, though, in the general series, they augmented with it. These occasional vibrations may be seen in Mr. Rickman's accurate detail.*

The proportion of these births to the marriages of the cor-

* The baptisms in England for thirty years, between 1801 and 1830, were as follow:—

1801	237,029	1810	298,853
1802	273,837	1811	304,857
1803	294,108	1812	301,954
1804	294,502	1813	314,432
1805	292,201	1814	318,806
1806	291,929	1815	344,931
1807	300,294	*1816*	330,199
1808	*296,074*	*1817*	331,583
1809	*299,969*	*1818*	331,384

responding year is at times very strikingly altered.* variations are also sometimes observable, if you com nativities of the following year with the weddings of ceding one;† so that, whichever way you view the diversity, and not fixity, has been the law attached t in this department of its operations.

The average proportion of births in England to

1819	333,261	1825	
1820	343,660	1826	
1821	355,307	1827	
1822	372,571	1828	
1823	369,760	1829	
1824	371,444	1830	

—making together 9,887,464 baptisms.—Rickm., xxx.

Here we find an increase, in the second year, of 36,808, and ir of 20,271; then augmenting 484 only in the third, and sinkii the fourth, and 288 more in the fifth, to rise in the next by to lessen again 4220 in the following year. Similar vacillati amid a general augmentation, which afterward ends with an of births of 145,031 in the last year beyond the number in t this series.

* The registered marriages in England from 1800 to 1830 we

1801	67,288	1816	
1802	90,396	1817	
1803	94,379	1818	
1804	85,738	1819	
1805	79,586	1820	
1806	80,754	1821	
1807	83,923	1822	
1808	82,369	1823	
1809	83 369	1824	
1810	84,470	1825	
1811	86,389	1826	
1812	82,066	1827	
1813	83.860	1828	
1814	92,804	1829	
1815	99,944	1830	

The amount of all these marriages for these thirty years is ! —Rickm. Pop. Abst., vol. i., p. xxxiv.

On comparing these with the baptisms of the same years, that to 94,379 marriages in 1803 were 294,108 births; while in year only 85,738 weddings had nearly the same number in 294, in the following year still less marriages, 79,586, had 292,201 b while, in 1812, there were only 82,066 weddings to 301,954 birt

† Thus 84,470 marriages in 1810 were followed by 304,857 1811, while near 2000 more marriages in that year had 3000 i tisms in the year after; so 8000 fewer marriages in 1816 produ more births in 1817.

The differences between the marriages of 1815 and 1817, and t of the consecutive years, are still more striking; for 99,944 mar *1815 were followed* by 330,199 births in 1816, while to 88,234 m *only in* 1817 were 321,384 baptisms in 1818; that is, 11,710 *fe riages* ▾ ▾ 1185 *more* births.

ulation was also found to differ in every county at every census; not only one county mostly from another, but also frequently from itself, at the four several decennial periods.* So the average summaries of all the counties put together, at each enumeration,† were dissimilar, producing a continual difference in the relative numbers and proportions of the births to the amount of the population of the country.

But, although the average proportion of births to marriages in England varied in every county, yet the result of all was estimated by Mr. Rickman to be, that 441 children were, upon the whole, the issue of 100 marriages, or not quite four and a half to each wedding.‡ This may be taken as the present standard of England's contribution to the population of the world.

Let us now observe what the average proportion of births to marriages has been found to be in other regions of the world. We have a series of detached numbers for sixty-four years as to the former kingdom of Prussia and duchy of Luthuania; and in these we find that the lowest ratio was three and one fifth, and the largest and most recent a little more than five births to each marriage,§ making, on an average of all the sixty-four years, four children and a quarter to every wedding in that population.‖

* See Mr. Rickman's corrected table of the five years preceding each return, vol. i., p. xxxii. The four first may be cited as a specimen.

	1796–1800.	1806–1810.	1816–1820.	1826–1830.
Bedford	35	32	33	35
Berks	34	33	33	32
Bucks	37	32	33	34
Cambridge	33	30	30	31

† The four averages on each census were: for 1800, 36; for 1810, 33; for 1820, 33; for 1830, 34.—Rickm.

‡ Pop. Abst., 1831, vol. i., p. xiv. The baptisms were as 346 to 100 marriages; but taking into account the births that were known not to be inserted in the church registers, they were as above stated.

§ Sussmilch's Tables, copied in Sadler, vol. ii., p. 197, furnish us, on calculating from them, the following annual averages:—

1603 to 1607	3 2-5 births.	1727 to 1731	4 1-4 births.
1608 to 1702	4	1732 to 1735	4 1-5
1703 to 1708	4 2-5	1736 & 1737	3 2-3
1709 to 1711	3 1-5	1738 to 1742	3 11-12
1712 to 1716	4 1-3	1743 to 1746	4 2-3
1717 to 1721	4 9-10	1747 to 1751	4 2-5
1722 to 1726	4 4-7	1752 to 1756	5 11-12

‖ All the marriages during this period amounted to 349,838, and the births to 1,488,365, which make an average of nearly four and a quarter

In France, a succession of twenty years, from 1810 to 1829 inclusive, yields an annual average of above three and a half;* and for five sequent years, rather more than one in four.† One of the latest nearly four.‡ So that from three and a half to four children to every marriage is the regular average of the annual addition of the female world in France to the amount of its population.

Russia varies most in this respect in her different provinces; for in one it was not much above two,§ and in another nearly five,‖ while in that of Moscow it was above five.¶ Three of the latest years that I have seen detailed, when its numbers have appeared to be most augmenting, yielded a ratio between five and five and a quarter.**

to every wedding; at four and a quarter they would have been 1,486,812. Divided into years, these numbers give an average of 5435 marriages and 23,256 births for every year, and this computation presents a similar annual average of nearly four and a quarter.

* The annual averages for these twenty years, from 1st January, 1810, to 31st December, 1829, were 49,885 marriages and 181,332 legitimate births. The ratio of three and five eighths would make 180,830; but if we add the 9687 illegitimates, the whole amount of births would be the annual average of 191,019, which are still under four to each.—Fer. Bull. Univ., 1831, p. 157.

† The five years for all France, from 1822 to 1826, present 218,917 marriages and 892,677 births; four and one twelfth would be 893,911.

‡ France in 1831 had 246,438 marriages and 986,709 births.—New Farm. Jour., Jan., 1834. Four to each would be 985,752. At Bordeaux in 1826 the marriages were 882 and the births 3771, which are nearly four and a quarter to each wedding.—Ami des Chanps, 1827, p. 166. In the department of Douay, 1829, the marriages were 6740, and the legitimate births 29,239, a ratio of nearly four and one third.—Bull. Univ., 1826, p. 147. Haute Vienne, in 1826, marriages 2949 and births 9807, which are not quite three and one third to each marriage.—Bull. Univ., 1831, p. 157. Dep. Lot in 1826, the average was not quite four: and in Dep. Doubs, 1829, it was four and a quarter.—Bull. Univ., 1831, p. 330. The Dep. du Nord in 1829 had 6746 marriages and 29,239 legitimate births, or four and one third.—Ib., 148. The statistical account in the "Revue Encycl.," May, 1825, and Oct., 1836, stated the ratio for all France to be then 4·08. In fifty-two departments, from the Haute Pyrenees to the Somme, to be from 4·90 to 4·01; and in twenty-eight, from Pas de Calais to Calvados, 3·99 to 3·16. In three it was five; and in two, 5·20 and 5·47.—Rev. En.

§ In the bishopric of Pultowa, 1824, the marriages were 30,126 and the births 65,706, or two and one sixth.—Hertha, 1825.

‖ In the bishopric of Woronesk in 1824 the marriages were 16,967 and the births 81,675.—Ib. 80,592 would be four and three quarters.

¶ In the government of Moscow in 1824 the marriages were 9924, the births 52,176.—Bull. Univ., 1826, p. 55. Five and a quarter births to each marriage would make 52,101.

** *In* 1833 the marriages of all Russia were 361,225 and the births

The kingdom of the Netherlands, now divided into the two, Holland and Belgium, produced four and a half in its southern provinces, and somewhat less than this in the northern ones.*

Part of Italy furnished various proportions from four to five.† Some portions of Spain not much above three.‡ Mexico exhibits a similar ratio.§ Silesia less than five;‖ and the Prussian Provinces on the Rhine three and one third;¶ while Portugal had above five.**

The average in North America formerly, for fifty-four years, was under four and a half, according to Dr. Barton.†† It was

1,845,045.—St. Petersb. Journ., 1835. The ratio of five and one ninth would produce 1,846,461. In 1834 the whole marriages were 362,530, and the births 1,908,678.—St. Petersb. Journ., 1836. The ratio of five and a quarter would have yielded 1,913,282. By the census of 1820, Mr. Sadler remarks, the marriages are stated to have been 317,805 and the births 1,570,399, vol. ii., p. 66. These are nearly five to a marriage. In Mr. Herman's account, quoted by Mr. Malthus, vol. i., p. 352, of the fifteen places he mentions, the ratio of births is only three in seven of these; four in six others; and in Tobolsk, five during four years; and in the next year, 1783, 6. Mr. Tooke's Table for 1799, cited by Mr. Malthus, vol. i., p. 372, presents the marriages of that year as 257,513 and the births as 991,915. This is as 385 to 100, or under one in four, so that there was no constant ratio.

* In the southern half the ratio was 4·57 to a marriage; in the northern, 4·30.—Bull. Univ. Mr. Sadler's list, taken from Quetelet, enables us to distinguish in this kingdom the different ratios of the Dutch and Flemish provinces. In the eight Dutch ones, the proportion was from 4·50 to 5·75. In the Flemish from Limburgh 3·09 to East Flanders 5·82.—Sadler, vol. ii., p. 449.

† Trieste in 1825 had 410 marriages and 1976 births. The ratio of four and three quarters would give 1947.—Bull. Univ., 1827, p. 250.

In Plaisance in 1824 the proportion was four and a half.—Ib., 1826, p. 54. In Palermo, for ten years, from 1806 to 1815, 4·05; and from 1816 to 1825 the larger number of 5·4.—Dr. Calcagni, ib., 1827, p. 121.

In the Pays de Vaud in 1825 the marriages were 1248. The births, 4974.—Ib., 1826, p. 138. At four to each marriage they would have been 4992.

‡ Barcelona in 1830 had 1137 marriages and 3762 births, or not quite three and one third.—Ib., p. 55.

§ At Guanaxata, in Mexico, in 1825, the marriages were 6976 and the births 23,809; at three and one third they would have been 23,253.—Grandy's Mem. on Guanaxata

‖ Silesia in 1824 had 20,924 marriages and 100,143 births; four and three quarters would give 99,389 births.—Hertha, 1825.

¶ In these Rhenish provinces in 1828 the marriages were 17,137, the births 79,241.—Bull. Univ., 1830, p. 435; nearly four and two thirds.

** The ratio of Portugal, according to one account, was 5.10.

†† Dr. Barton's average of fifty-four years in Massachusetts was 521 marriages to 2247 births, which gives a ratio of not quite four and one third to each.—Trans. Am. Phil., vol. i., p. 30.

under five in Canada in 1833;* and the list of the provinces of Prussia, in 1784, gives us variations in each from about three and a half to five children to every marriage that had taken place.† In Denmark the ratio is usually four.‡ In Sweden much the same.§

To the above facts I will only add another from our transatlantic provinces. We have the series of marriages and baptisms in the district of QUEBEC for twenty-eight years. The annual ratio of the births to the weddings was always fluctuating; but the general average of the whole twenty-eight years was not quite, but very nearly, five and a half to each marriage.‖ This is not a proper specimen of the natural proportion of the births in a native population; because they were increased beyond the usual rate by the emigrants who successively arrived;¶ but I mention it because it gives the highest proportions of births which any registration contains for so long a period. Yet, though swelled in the births by the addition from mothers not married there, but coming from other

* The account of 1833, in Canada, was 2873 weddings and 13,721 baptisms.—New M. Mag., June, 1834. Four and two thirds to each marriage would be 13,406 births.

† In 1784, the births to the marriages in the Prussian provinces were, as calculated by Sadler, on the facts collected by Busching,

West Prussia and Netz	5·01	Cleves	4·16
Pomerania	5·06	Minden and Ravensburg	4·45
East Prussia	5·13	Magdeburg	4·66
New Mark	4·68	Neufchatel	3·73
Mark Brandenburg	4·53	Moero	3·53
East Friesland	3·83	Halberstadt	4·59
Guelderland	4·19	Ticklinburg and Lingen	3·20
Silesia and Glatz	5·19		

2 Sadler, p. 422.

‡ "The registers of Denmark, as quoted by Sussmilch, from the years 1769 to 1774, give, on an average, 4·89 children to every marriage."—Sadler, vol. ii., p. 379. But "in twenty years afterward, the population having considerably augmented, it was reduced to 4·04 to one."—Ib., p. 486. In 1830, the marriages were 10,774 and the births 43,266, or nearly four to a marriage.

§ In Sweden, from 1749 to 1763, there were 315,502 marriages and 1,312,255 births.—Wargentin, 1766. 2 Sad., 383. This is rather above four and one sixth to each wedding. The five years from 1821 to 1825 give the numbers of 23,772 marriages and 95,706 births, which are nearly four births to every marriage.—Bull. Univ. Sad., 487.

‖ The whole marriages from 1794 to 1821 inclusive were 20,512; and all the baptisms 112,009.—Bouchette's Brit. Dom., vol. i., p. 356. At five and a half to each marriage the births would have been 112,816.

¶ To this cause I would ascribe the ratio, being four times six and three times six and a half. The lowest proportion was four and one third.

parts, and having children during their stay or settlement in the province of Quebec, the ratio was, on the whole, even with this augmentation, not more than five and a half.*

From all these instances we seem to be fully entitled to affirm, that no population has continuously so many as six to every marriage, if all the births be divided equally between all the marriages; nor so few as three in the general stream and series of human nativities.

Here, then, we find the two established limits by which population is everywhere circumscribed. The confining law has been thus fixed to be, that never, consecutively, less than three nor more than six births shall occur to the marriages of any community on the general average of all. How this limitation is so steadily maintained, we know not. But it has obviously been made, not a rule of individual constitution, because mothers vary from each other in the numbers of their offspring, but a rule of secret adjustment, from the beginning of our present system, between all the mothers in society and their produce. An unknown process, by means inscrutable by us, is always carried on, which so adjusts the childless marriages with the prolific ones, and with all the diversities of their produce, that their limits shall never be continuously overpassed. Here again Intelligent Agency makes itself, amid its invisibility, conspicuous to our mental discernment. For, as a limited portion only of the female world have to replace the dying generation by a new one, the proportion of births to their marriages must be steadily regulated and adapted, according to the purpose, at each period; according as it is intended that a society shall decline, or keep stationary, or increase. Each of these alternatives will depend, in the first place, on the ratio of the births that is for the time sustained in the particular nation. To this the deaths have to be adjusted, to make the result correspond completely with the purpose. But the adaptation must commence with that of the births to the marriages, as they provide the materials on which the laws of death are to operate, and to which these must be

* At Vevey, in Switzerland, M. Muret ascertained the curious fact, that 375 mothers had yielded 2093 children, all born alive; or 5 10-12 each on an average. Mr. Malthus, in noticing this, very properly mentions that every wife is not a mother; and as M. Muret had also found that 20 out of 478 were the usual proportion of these at Vevey who were barren, Mr. Malthus, allowing for this, considers the true ratio for all to have been five and a half to each marriage.—Malthus, vol. i., p. 408.

adjusted, according to what the plan requires, for each respective country.

These limits are the assigned means or established laws by which all undue multiplications and all undue diminution are alike prevented. The producing marriages are limited by the maternal ages of the female world, and therefore by that proportion of women who are living in their contemporary population of these ages. The births, from this limited portion, are again bounded by the two confining ratios just mentioned. Thus, before the laws of death begin their operation, the numbers of mankind are under a natural and perpetual regulation and restriction on their coming into existence here at all. No more can appear on earth, to enjoy their human life, than these limiting laws of marriage and births admit of. So that human population begins, from its very origin, under strictly bounding, and governing, and adjusted laws.

But while it is thus confined to degrees and proportions which it cannot exceed, yet, within these limits, we perceive that it is allowed to vibrate and vary. It has been made subject to be influenced to its diversities by local, personal, constitutional, social, and other circumstances, which would lead us into too much digression to investigate here. But even these limitations, which are quite independent of those which arise from the laws of death, are quite sufficient to preclude the possibility of the geometrical augmentation.

For, as both marriageable women, who can have the maternal character, and their marriages are only such proportions to the whole population as were stated in the preceding letter, it seems not to be possible that a constant natural law or overruling system, reducing the general produce of all the marriages of a community to an annual average of less than six, from a limited portion only of the female world, can, in twenty-five succeeding years, produce so many additional numbers from any original population as to double in that time. Such a duplication, under this established system, appears to be incompatible with such restrictions. But does not this plan of fixed general boundaries, and of freedom to vary within them, as the state of each society occasions or may require, indicate a wise and benevolent administration of human life? The limits as to female marriageable life, and the two limits as to births from it, preserve society from what, if unconfined in either point, would be inconsistent

with the providing system of our maintenance; at the same time, the permitted diversity of the intermediate proportions gives to our great Director the easy command of it, according to his local and temporary plans and purposes. These variabilities enable him to increase a people where he chooses, and in such degrees as he thinks proper, or to keep them stationary as long as that condition suits anywhere his designs. Hence these differences become likewise the instruments by which he regulates each nation with respect to the other. While one is to be weaker, the smaller ratios operate; as they enlarge in others which are intended for the time to preponderate.

Thus, without interfering miracles, these limitary laws of marriage and of births, and the diversifying ratios within these established limits, allow him to place every people in the state and circumstances which, for the time, are most expedient, by natural application of those natural laws which, from the constitution of our frame and world, have been made to be applicable to these objects, and have been provided to be so under his superintending care. Is not all this such satisfactory evidence to us of his wise and provident plans and administrations as to human society, as to make all gloomy anticipations or misanthropical systems both unreasonable and ungrateful?

Births may be considered in another point of view; and this is, as to their general average proportion to the existing numbers of a population. Let us collect a few instances of these.

In England and Wales, this annual proportion has been one in twenty-eight in the last enumerations.* In France, taking the whole country, it was one to thirty-one and two thirds; but in the separate departments it varied from one in twenty-five to one in forty-three;† in Savoy, about one in

* "The proportion of registered baptisms to the population is as one to thirty-four in England; the several counties ranging between one in thirty-one and one in thirty-eight. Including unregistered births, the proportion of births to the population of England and Wales has been one in twenty-eight since the year 1820."—Rickman, vol. i., p. xliv.

† The Compte-general for 1826, by the Garde des Sceaux, gives these results, with the details. The department of the Loire had the most, being one in twenty-five and two thirds persons; Calvados the fewest, being one in forty-three and one sixth.—Bull. Univ., 1828, p. 28-30. Before the revolution, Necker stated the ratio to be one to twenty-five and a quarter.—Admin. Fin., *vol. i., p. 254.*

thirty-two ;* in Venice, one in twenty-three ;† in one in twenty-one or twenty-four.‡ In the Netherla ratio varied from one in twenty to one in twenty-nin New-York, the births were rather more than one twen part of the people.‖ In Russia, the census of 182 their nativities there rather more than one in twent In Switzerland the proportion was, in some parts, thirty-six.**

From these instances we may infer that one in tv the highest number that are born in any known pop and less than one in fifty the lowest amount that ha observed. Here, again, appear two natural and est limits, which preclude any augmentation or decline in beyond these boundaries. So many as one in twenty, few as one in fifty, to a population are nowhere bo the actual nativities which are to form the new gen are always within these bounding extremes, or very ne

But if we take the lowest of these, even that ratio to the Malthusian theory ; for if the births were conti one in twenty in a nation, then a twentieth part of it be born every year; and, consequently, it would twenty years to pass before as many could be born as equal the coexisting population.

* At Maurienne, in Savoy, the average of births in twent from 1810, was one in 30·1 in the Alpine regions, one in 31·9 in th grounds, and one in thirty-two in the lower parishes, where was chiefly cultivated.—Bull. Univ., July, 1831, p. 256.

† Signor Quadri states the average of the births at Venice the five years from 1819, to have been one in twenty-three.

‡ Dr. Calcagni, in his Tavole di Palermo, found that, for the t from 1805, the ratio was one to twenty-one; and in the subseq years, one in twenty-four.

§ Mr. Sadler has collected the proportion of the provinces chie Quetelet. The Dutch portion was from the rate of one in 20·7 land to 27·1 in Friesland. The Flemish part varied from 26·1 i Brabant to 30·7 at Antwerp.—Sadler, vol. ii., p. 449.

‖ In the census of the state of New-York for 1825, the populat returned to be 1,616,433, and the births 60,383 for the preceding National Gazette, Feb., 1826.

¶ The Greek Church population of Russia was found to be, 40,351,000, and the births of that year 1,570,399.—Sadler, vol. ii.,

** In the Pays de Vaud it was found by Muret to be one to thi In one little village of only 400 persons it was only one in for —Malthus, vol. i., p. 381–404. But this was too small a place, peculiarly situated to be any example of a general law. In anot ish in the Jura, St. Cergue, "the births were a twenty-sixth par *population*."—Malthus, 404.

But to equal is not to double; therefore twenty more years of the same rate of births must ensue before the numbers would be doubled. But these would make together forty years. So that the greatest number that have been known to be anywhere born could not double the population in twenty-five years.

But this proportion of one in twenty is a local and a rare one. The more common proportions are from one in twenty-five to one in thirty. At the rate of twenty-five a year, the time of duplication would be near fifty; at that of thirty it would approximate sixty. But all these periods the regular laws of death considerably elongate.

In all these inquiries, we must likewise recollect that the question as between man and Providence, that is, between mankind and the yearly produce of the earth, is not what amount of human beings is produced in any particular country, but what number the varying rates of birth in every country cause to be alive in their totality as contemporaries over the whole earth; for then we shall find that, if more arise in one nation, fewer come into being in another. So that the correct inquiry will be, at all times, What is the general result of all these laws and ratios, in comparing the entire quantity of coexisting mankind? Then we shall find that the more in some places and the fewer in others mingle together in a certain level average, which is the actual exhibition of the real increase of the earth's population, and of the practical agency of the laws of human births. It is with this total average that the provisions for our subsistence are to be always compared; for we have found, in all ages, that as one country, from any cause, needs more food, others have always a redundancy of it to supply their wants; and it has ever been one of the earnest objects of commerce to convey corn and nutriment from the abundant regions to those where the relieving cargoes are required.

There seem to be some other ancient laws about birth which deserve our attentive study, to see if they are well founded. One of these is the circumstance remarked by Mr. Sadler and others, that they vary according to the density of the population where they occur, most births taking place where the people are fewest, or most scattered on a given place.*

* "The prolificness of human beings varies in proportion to their con-

Another fact has been also noticed, that births increase when the deaths become more frequent; here the connected cause has not been satisfactorily accounted for, and seems to be linked with something more than human or common agencies.*

It has also been observed, that the most births appear (and reckoning nine months back from the time of their occurrence, that the commencement of the human formation takes place) more frequently in some months of the year than others. Natural causes, arising from unknown effects of the as unknown atmospherical changes or moving agencies at the different seasons of the year,† may contribute to these results.

densation. It is greatest where the numbers on an equal space are fewest. It is smallest where the numbers are largest."—Sadler, vol. ii., p. 352. He has thus computed and distinguished, in this respect, the differences of the births in England to 100 marriages.

Where the population on the square mile is—

From 50 to 100, the births are	427
100 to 150	414
150 to 200	406
200 to 250	402
250 to 300	392
300 to 350	375
500 and upward	332

Ib., p. 400.

* "The prolificness is greater where the mortality is greater: smaller where the mortality is less."—Sadler, ib., 355.

Ferussac remarks on this point, "Another result is, that the births are in a direct ratio to the mortality." Malthus and Valermi agree in this, but say that the fact has not its principal source in a law of nature; but, whatever be the cause, M. Quetelet has verified the fact, even in the different months of the year, as he showed in his "Memoir on the Mortality of Brussels." M. Lobatto verified it also in Amsterdam, Antwerp, Ghent, Rotterdam, and the Hague.—Bull. Univ., 1827, p. 92.

† Mr. Verelst found the mean results of eighteen years' observations at Brussels to be—

FIRST PERIOD.	MONTHS OF BIRTH.	BIRTHS.
May	February	1·1570
June	March	1·0991
July	April	1·0790
April	January	1·0403
March	December	1·0175
August	May	0·9893
February	November	0·9679
September	June	0·9599
January	October	0·9492
December	September	0·9401
November	August	0·9033
October	July	0·9012

Bull. Univ., 1827, p 92.

It has also been observed, that the births occur more numerously in a morning than in the evening.* In all these peculiarities, in proportion as they prevail and recur, the features of plan, and regulating agency, and of providing foresight, and I think, also, of superintending government, appear, to our contemplation, accomplishing determined purposes and operating to an assigned end.

LETTER XIII.

The Laws of Death considered.—Their Adjustment to the Laws of Birth.—Statement of their Rate and Proportions in different Countries.

My dear Sydney,

Let us now endeavour to trace the laws and principles on which the withdrawing and destroying agency of Death is administered as to the human race. The consequences which follow from it are very extensive and multifarious. But we

Mr. Lemaire's average of twenty years, from 1806 to 1825, at Tournay, has many similarities to this. I will cite only his months of the births.

	BIRTHS.		
April	1·1303	June	0·9651
February	1·1192	November	0·9305
May	1·1140	July	0·9272
March	1·0807	October	0·9292
January	1·0408	August	0·9259
December	0·9073	September	0·8587

Bull. Univ., 1827, 95.

* At Brussels, the nativities, from 1811 to 1822, in the Hospital de Maternité there, were found to take place in the following numbers at the different hours:—

HOURS.	MORNING.	EVENING.	HOURS.	MORNING.	EVENING.
1	142	94	7	112	121
2	173	97	8	99	97
3	130	88	9	88	133
4	122	91	10	130	115
5	120	104	11	137	224
6	111	100	12	48	4

Mr. Villermi found analogous results in the Hospital of Maternities at Paris.—Bull. Univ., ib.

will confine ourselves to a consideration of the system which has been established as to its operation on our population, and to the laws by which it is made to regulate the state and numbers of the human race, in their several national aggregations and general amount.

The laws of death, as soon as we begin to study them, are easily discerned to be much more peculiar and complicated than those of marriage or birth. I have already objected to the consideration of it only as a check, and repeat the caution to avoid a term that misleads. Death is as much a principle in the formation of human nature as birth and marriage, and has invariably accompanied both. It has been always, since the days of Adam, an essential part of the Divine plan as to mankind, that all who are born shall die. This was made, from the beginning, a fundamental law, as soon as our first parents showed that both themselves and their descendants would not submit to be trained and taught by their Divine Preceptor. Certain, by this decision, and by acting as they chose, in disregard and disobedience to him, that they would not spontaneously become, as he desired, such improved, and admirable, and congenial beings as he meant to immortalize, he ordained that their existence on the earth on which he placed them should not be perpetual. The operation which we call death was appointed to terminate, in all, the temporary connexion of their intellectual soul with its earth-formed body, and to remove the living principle elsewhere. Death is, therefore, as inseparable from birth as that is from marriage; all three are original and essential parts of our system of human nature in its present residence. Neither occurs without the other; each is alike important—each has been adapted to the other. Death is, therefore, one of the primitive laws of our life on earth, and of the organic constitution of our frame. Our body is so made that it must die, as it is at present composed, and as its functions are arranged. No art or means can prevent its dissolution, or the departure of its animating spirit, when the agencies occur that are to effectuate the change. Violence may accelerate the time, which skill may a while protract, but nothing on earth can eventually avert it.

If death had not been made a part of the present economy of our being, the system of our births could not be what it is; nor could mankind be either what they have been or what they

Every portion of human life; all its movements and in-
ions; all its laws, polities, habits, and occupations, have
ne what they are under the influence and from the effects
e certain and unceasing occurrence of our individual mor-
. Take away death from the world, and the whole
ework, spirit, view, and operations of human society must
ltered. Its present form and establishment would not
an immortal population, nor would have proceeded from
r-dying beings. Let us, then, consider the laws of death
riginal principles of the earthly system of human nature,
begin our inquiry on their nature and operation with the
that have appeared from them in our own country.
ne deaths in England, as everywhere else, have varied in
ber every year, with fluctuations to and fro, that have not
sponded with the apparent progression of the whole pop-
n. Their series in the last thirty years sufficiently show
act.* In this we see that, in its first year, 20,891 more
than in the tenth year afterward, when our numbers had
ased by one million and a quarter, or nearly one seventh
† There were frequent vacillations of this sort, as if no
ant law, known to us, was in operation to produce them.‡

Mr. Rickman's corrected numbers of the burials are—

1	204,434	1816	205,959
2	199,889	1817	199,269
3	203,728	1818	213,634
4	181,177	1819	213,504
5	181,240	1820	208,349
6	183,452	1821	212,352
7	195,851	1822	220,415
8	200,763	1823	237,386
9	191,471	1824	244,074
0	208,184	1825	255,018
1	188,543	1826	268,161
2	190,402	1827	251,871
3	186,477	1828	255,323
4	206,403	1829	264,230
5	197,408	1830	254,067

Pop. Ab., xxx.

801, 204,434; 1811, 188,543.—Ib.
a the first seventeen years, the deaths were only in three of the
more than the first year, notwithstanding the continual increase
population. The variations were successively unequal in them-
s, and not governed by the amount of the people. Thus, 4544 less
22; 3839 more in 1803; then lessened by 17,449 in 1804; increasing
1805 and 2212 in 1806; enlarging the two next years, to sink by
inution of 9292 in the one following; again rising by 16,713 in the
eding *year, to lessen nearly* 20,000 in that which came after, and

Their annual proportion to the population, as calculat
averages of five years, exhibits similar diversities in
period so surveyed;* and if, from the general amounts
we extend our view more minutely into the several co
of our nation, we find the same variances in each of
averages.†

Another remarkable correspondence appears between
and deaths, announcing a grand adjusting, though inv
agency in the fact, that as in the births more males th
males had been born during those thirty years,‡ so like
within the same period, a greater number of males had

so on. In the year 1813 the deaths were nearly 18,000 fewer t
the year 1801; the population had been twelve years multiplying;
in the next year, increased by nearly 20,000—a series of fluctu
which imply corresponding diversities in the moving causes of mor

* Thus the average of the deaths between 1796 and 1806 was 1
between 1806 and 1810, 1 in 49; between 1816 and 1820, 1 in 55; a
tween 1826 and 1830, 1 in 51. Thus, as if the duration of life h
creased with the population till 1820, and then lessened in the lat
riod, though the numbers continued to increase.

† Mr. Rickman has calculated the following proportions for the
in the different counties from 1826 to 1830. From his alphabetical
I place them according to their rates: the highest number marki
fewest deaths or the healthiest county at that time.

Monmouth	69	Bucks	
Cornwall	64	Chester	
Gloucester	61	Durham	
Suffolk	59	Essex	
Devon	58	Norfolk	
Dorset	58	Northumberland	
Somerset	58	Rutland	
Sussex	58	York City and Ainsty	
Warwick	58	Lincoln	
Hereford	57	Nottingham	
Wilts	57	Stafford	
Hertford	56	Worcester	
Southampton	56	York, East Riding	
Westmoreland	56	York, West Riding	
York, North Riding	55	Northampton	
Bedford	54	Kent	
Cumberland	54	Surrey	
Derby	54	Huntingdon	
Leicester	53	Lancaster	
Oxford	53	Cambridge	
Salop	53	Middlesex	
Berks	52	Rickman, ib., p. xx	

‡ The whole numbers of baptisms, collected for the purposes
four population acts, appear to be:—

8,335,866 males,
7 967 710 females.

.* These differences between the comparative births aths of the two sexes are in other countries nearly sim- Thus the mortality to our race is, by some powerful er-acting law, so regulated with relation to the nativi- at the two sexes, amid all the diversities, are always the same general proportion to each other—a striking that death, as well as birth, is governed by established ctuating to a specific end, and never ravages at random. erations, indeed, occur on rules and principles which we ot yet descried. The mortal agencies act with differ- which we are unable to elucidate; for, in the twenty- ars after 1800, the mortality of England lessened more ore, and yet, in the succeeding ten years, it has, on the y, much increased; though at both periods the coun- s enlarging, both in numbers and prosperity.‡

a remarkable fact, that although for the thirty-six years elapsed from 1780 to 1815 the population was pro- ely increasing during that period, yet little or no aug- ion occurred in the number of the deaths. The averages y five years nearly approached each other;◊ and more

the baptisms of males are 10,435 to 10,000 females.—Rickman, . xliv.

e whole number of burials, under the returns for the four popu- cts, were 11,588,938; of these

5,819,923 were males,
5,769,015 were females.

h we may add those males who died abroad in the employment nd commerce.—Ib., xliv.

years of war occasioned many of our males to die abroad. previous to the year 1821, the burials of the two sexes were in umbers; but Mr. Rickman justly adds, "The effect of settled now shown by the increased proportion of males who die and ed at home."—Ib.

ts the male and female births and deaths in Russia in 1834

Births	979,877 males,
	928,678 females.
Deaths	657,822 males,
	633,176 females.

Journ. St. Pet., March, 1836.

he mortality of the inhabitants of England appears to have sunk inimum in the decade preceding the population abstract of 1821; ce that time, it seems to have risen as fast as it descended after 1800."—Rickman, vol. i., p. xxxv.

e several averages were—

1780 to 1784	192,813 deaths.
1785 *to 1789*	187,029 "

actually died in the first year of the series, 1780, when the population was smallest, than in the last term, 1815, when the people had become so much more numerous.* The average of the whole thirty-six years was not much less than that of the last five.† So that, in all this period, while the agencies of birth were kept in a steady process of a certain rate of production, those of death were made to be stationary, in order that the population might more particularly enlarge—a striking instance of the supervising attention of the regulating power.

The annual deaths varied in a similar manner on the Continent in the common course of the mortalities. One instance of this may be cited in Prussia and Lithuania. The yearly amount here fluctuated to and fro,‡ and without any great increase, till sixty years had elapsed.

For the ten years between 1820 and 1830 the relation between marriages, baptisms, and burials, in England and Wales,

1790 to 1795	192,373 deaths.
1796 to 1800	196,287 "
1801 to 1805	194,094 "
1806 to 1810	195,944 "
1811 to 1815	193,847 "

Rickm., vol. i., p. liii.

* In 1780 were . . . . 198,348 deaths.
In 1815 . . . . 197,408 ditto.—Ib.

† The general average of the thirty-six years was 193,198, being only 649 less than the average from 1811 to 1815.—Ib.

‡ I take the first ten years of the burials in Sussmilch's Tables, and another ten years at a later period of it.

1693 . . .	16,881	1738 . . .	15,686
1694 . . .	14,918	1739 . . .	15,806
1695 . . .	14,964	1740 . . .	15,390
1696 . . .	12,786	1741 . . .	15,288
1697 . . .	14,761	1742 . . .	14,015
	74,310		76,185
1698 . . .	17,091	1743 . . .	13,280
1699 . . .	14,121	1744 . . .	12,792
1700 . . .	15,165	1745 . . .	15,443
1701 . . .	13,761	1746 . . .	18,956
1702 . . .	12,732	1747 . . .	15,769
	72,870		76,240
After 1750 the numbers were—			
1751 . . .	18,287	1754 . . .	19,064
1752 . . .	19,066	1755 . . .	19,169
1753 . .	18,898	1756 . . .	19,584

Sussm. Tab. in Sadler, vol. ii., p. 200.

stood, as nearly as can be calculated, in this proportion, on a summary of each, namely, three and three quarter births to a marriage, and two and a half deaths;* so that there arose, during that period, about one and a quarter more to every marriage than death took away,† and by this proportion the English population was then naturally increasing. This would make about seven and a half births to five deaths, causing deaths to be one third less than the births in England and Wales at this period.

In Denmark in 1830 the same relations were four births and nearly three deaths to a marriage, which is a fifth less surviveship than in England.‡ In Brussels in 1833 the deaths were in such a large proportion that the city would in time have been unpeopled, without fresh arrivals from the country.§ In France in 1831 the relation was four births and three and a quarter deaths to a marriage.‖

As between the sexes, a larger number of males are everywhere born than females.¶

* Mr. Rickman's summary, from 1821 to 1831, conclusive, is—

Baptisms	3,753,493
Burials	2,462,907
Marriages	1,052,095—3 Pop., 486.

† The one and a quarter survivers from the marriages would make 1,315,118 individuals; but the population of 1831 was found to be 2,047,687 beyond that of 1821, which is 732,569 above those that proceeded from the intervening marriages. But this difference would arise from so many of the deaths of the interval falling on the population of 1821; the result of the action of death, on both new and old, in these ten years, was the 2,000,000 increase which appeared in Great Britian at their close in 1831.

‡ The marriages were 10,774; the births 43,266; the deaths 31,294.—Mr. Porter's Paper, Athen., 1836, p. 226.

§ In this year the marriages in Brussels were 866, the births 3983, or above four and a half to each marriage; the deaths 4277, almost five. The account, as between the sexes, evinced the birth of most males, but the death of most females.

Born, 2052 males,		1931 females.
Died, 2092 "		2185 "

Stand., 23 Jan., 1834.

‖

Marriages	246,438
Births	986,709
Deaths	802,761

Ann. Long., 1834.

¶ Thus in France during the fifteen years from 1817 to 1833 there were born—

7,490,031 males,
7,041,247 females.

Annuaire Long. for 1834.

Let us now examine the proportion of a population wh
usually die, either every year or for any series of years.

Sir William Petty considered, that in his time, 1682, th
were in England twenty-four births for twenty-three burial
Other computations, of which he spoke respectfully, reckon
five births to four burials; and calculated that, in the co
try, the proportion of annual deaths to the population was 1
30 or 32.† As a medium, he supposed that there might
about ten births for nine burials.‡

This is that moderate rate of increase which is so conc
dant with what appears to have actually taken place, that i
very probable that it expresses the prevailing course of nat
as to human multiplication at that time.§

From one series of his, he said, "We have good experie
that in the country but 1 in 50 die per annum."‖ T
would come near Mr. Rickman's calculation of the pres
proportion being 1 in 49.¶

In our recent enumerations, we perceive that, in
county, the births and deaths were equal for one period of f
years;** but, in a later term of that duration, the baptis

So in England, for the ten years from 1821 to 1830, the baptisms wer
1,917,444 males,
1,836,049 females.
Rick., vol. iii., p. 48

* Essay on Polit. Arithm., p. 13.

† There are also other good observations; that even in the countr
in about 30 or 32 per annum had died, and that there have been
births for four burials.—Ib., p. 14.

‡ Ib., p. 15.

§ Sir William remarks on wars, plagues, and famines, that "the effi
thereof, though they be terrible at the times and places where they h
pen, yet, in a period of 360 years, are no great matter in the whole
tion. For the plagues of England, in twenty years, had carried a
scarce an eightieth part of the whole nation; and the late ten years'
wars, the like whereof had not been in several ages before, did not t
away above a fortieth part of the whole people."—Ib., p. 15.

‖ Ib., p. 13.

¶ "The registered mortality in the several counties of England, f
1826 to 1830, ranges between forty-one in Middlesex and sixty-four
Cornwall. Including unregistered deaths, the mortality of England
Wales since 1820 is estimated at 1 in 49; though on another calcula
it would be 1 in 45."—Rick. Pop., vol. i., p. 35. The differences betw
Sir W. Petty, 1 in 50 and 1 in 32, may have arisen from averages ta
in two different counties, as in Mr. Rickman's Middlesex and Cornw

** This was Cambridge from 1806 to 1810. The average of both
tisms and burials was 1 in 30.—Ib., 32. Middlesex twice came ra
near this; for in this same period it had thirty-nine births to thirty

arly double the burials there.* In all the other coun- deaths fell annually so much short of the births as to f that gradual increase of British population which its tional enumerations successively displayed. The aver- mary of all the counties was, from 1796 to 1800, four three deaths.† From that time the nativities increased deaths lessened, though not in equal degree, nor with- s succeeding the flow. The five years preceding the sus exhibited the average result of fifty-one births to our burials.‡ Sometimes the births diminished as the decreased,◊ but this was neither continued in the same ll nor frequent elsewhere. No settled ratio of that peared in any.¶ Considered with respect to the whole nity, the latter period of the last census presents nearly the proportion of four burials to six births in our favoured, healthy, and prosperous country.** established course of nature has not produced, in other es, any results contradictory to these which have thus d in our own; they vary everywhere; but always, like hs, within ascertainable limits, except in the rare pes- l visitations.

827 the general average of deaths in all France was in portion of nearly 1 in 40.†† It varied in its several

and between 1796 and 1800 the proportions were thirty-nine to ven.—Rick. l'op., vol. i., p. 32.

Cambridge, from 1816 to 1820, the average births were 1 in 30 and s 1 in 55. From 1796 to 1800 they stood as thirty-three to forty- from 1826 to 1830 as thirty-one to forty-five.—Ib.

births were 1 in 36, the deaths 1 in 48.—Ib.

ween 1806 and 1810 the average rose to 1 in 32 baptisms and 1 rials. Between 1816 and 1820 the births fell back to 1 in 33 and s lessened to 1 in 55. Between 1826 and 1830 the births lessened o 1 in 34 and the deaths increased to 1 in 51.—Ib.

n Monmouth, from 1796 to 1800, baptisms 1 in 56, deaths 1 in

relative numbers changed afterward to 45, 64; 46, 66; 45, 69.—Ib.

s the proportion of 1 in 34 births occurs with the different rates 6, 47, 49, 51, 54, and 56 of the deaths. So 46 in the deaths has irths in different counties 30, 33, and 34. The latter four times, re connected with the 46; but that 34 in the births has the above in the deaths.

e fifty-one births to thirty-four burials are as twenty-five and a eventeen, or twelve and three quarters to eight and a half. This es to the relation of six to four.

e "Revue Encyclopedique," calculating the rate of mortality in rent departments of France in 1827, found that its largest opera-

departments, like ours in our counties;* and in one th deaths exceeded the births.† On the whole, they were t each other in the ratio of 1000 to 800, or five births to fou deaths.‡

In Denmark in 1830 the ratio was 1 birth in 28, and death in 39, and in these numbers nearly seven nativities t five departures.§ In the Netherlands, at that time, simila proportions appeared.‖ In the Prussian provinces on th Rhine the ratio was nearly the favourable quantity of eigh born to five that died.¶

In Mexico one of the greatest instances of annual mortality occurs. The deaths in 1825, in one of its provinces, were so unusually numerous as to be 1 in nearly 20; sweeping off, i they continued in that ratio, a whole generation in twenty years.**

In the kingdom of Prussia and duchy of Lithuania the pro-

tion was one in twenty-seven and three fifths in Finistere, and only one in fifty-three and a half in the Haute Pyrenees. For all France collectively, the average was 1 in 39⅔.—Rev. Enc., vol. xxv., p. 580.

* In 1826 it was 1 in 42 in the Doubs and 1 in 37 in the Lot departments; and in 1828 1 in 37.—Bull. Univ., 1831. In the department of L'Aisne the result was found to be, that the births in 1818 were one seventh more than the deaths.—Ib., 1826, p. 21. In all the departments but Finistere the births were greater than the deaths in these ratios. To 1000 births the deaths were—

In 7 departments	.	.	.	from 935 to 902
32	ditto	.	.	.	.	" 895 to 800
39	ditto	.	.	.	.	" 799 to 705
7	ditto	.	.	.	.	" 699 to 656
In Bas Rhin	.	.	.	" 680—Rev. Enc.

In the department of Haute Vienne, during the twenty years from 1809 to 1829, all the births were 191,019 and the deaths 156,187, making an excess of births, in twenty years, of 34,832 to a population of 276,351; marriages 49,885.—Bull. Univ., 1831, p. 157.

† This was Finistere, in which there were more deaths than births in the proportion of 1027 to 1000.—Ib.

‡ In all France there were found to be 798 deaths to 1000 births.—Rev. Enc. So in 1831 all the births in France were 986,709 and the deaths 802,948.—Annuaire Long., 1834. This is nearly five to four.

§ The deaths were 1 in 39, the births 1 in 28 to 29, or 31,294 deaths and 43,366 births, which are nearly five to seven.—M. Porter's Paper to Statist. Soc. Athen., 1836, p. 226. ‖ Bull. Univ., 1830, p. 232.

¶ Or 52,717 deaths to 79,241 births.—Bull. Univ., 1830, p. 435.

** In 1825 the total population of Guanaxata, in Mexico, was 382,829. The marriages were 6976, the births 23,809, and the deaths 19,431. This extra mortality is thus accounted for. The Indians live in villages in their old manner, and do not avail themselves of the improvements in arts or agriculture. Diseases take them off by thousands.—J. Grandy's *Mem.* on Guanaxata.

portions continually varied in a succession of sixty-four years. In fifteen years of it there were five births to three deaths; in twenty-four, about six to four; in the remainder, except an interval of pestilence, nearly seven to five.*

The small parish of Leysin, in Switzerland, mentioned by Mr. Malthus,† deserves our notice, as an instance where the law of population is so administered that for thirty years the births and deaths nearly balanced each other.‡ This must be the case in every age and country where the population is kept stationary. It was maintained in this state in this little community.§ The increase here was so gradual, that it would have taken more than the time which elapsed from Moses to Augustus to be doubled.‖ I believe that all countries have been, at various periods and for a considerable series of years, in this state, and are so, and are never otherwise, but as it

* Sussmilch's Tables enable us to make the following approximating ratios on the average, reckoning five years:—

	BIRTHS.		DEATHS.
From 1693 to 1697	7	to	5 2-7
1698 to 1702	5	to	3
1703 to 1708	5	to	3
1712 to 1716	9	to	5
1717 to 1721	5 1-4	to	3
1722 to 1726	6 5-8	to	4
1727 to 1731	6 3-8	to	4
1732 to 1737	6	to	5
1738 to 1746	6	to	4
1747 to 1751	7	to	4 1-4
1752 to 1756	7	to	4 3-4

See the Tables in Sadler, vol. ii., p. 200.

† Malth. Pop., vol. i., p. 401.

‡ "The average number of the births being, for a period of thirty years, almost accurately equal to the number of deaths, clearly proved that the habits of the people had not led them to emigrate; and that the resources of the parish for the support of the population had remained nearly stationary."—Malth., ib., 402. Mr. Muret stated the particulars in his "Memoires Soc. Econ. de Berne" for 1766.

§ Its population in Muret's time was 400, and the births but little above eight in a year. In ten years were 45 marriages, 83 baptisms, and 82 deaths; making the births as one in forty-eight and three quarters, and the deaths as one in forty-nine and three eighths.—Muret's Memoires Soc. Econ. de Berne for 1766.

‖ Sir F. D'Ivernois computes that its period of doubling would have been 2636 years; and adds, that this place still numbers only 447 inhabitants. He describes it as among the higher Alps. It is near the summit of the habitable country. The prevailing cold is so rigorous that its inhabitants cannot raise either wheat, oats, or rye, nor any bread-corn, except the barley of Siberia.—*For. Quart. Rev.*, No. 26, p. 275.

suits both the local and general plans of Providence that they should advance, or decline, or continue in a level state.

In Russia, as we have stated in preceding notes, both the deaths and their ratio fluctuated. In that year of war whose frosty nights in autumn were so fatal to Napoleon, the deaths in her empire were more than the births,* as they commonly are in her capital.† For ten years, the deaths in her whole population were but two thirds of her births; of three born only two died.‡ In 1833 her births were as six to five, or one sixth more than the deaths;◊ and in the next year the excess of nativities again rose to the proportion of three to two.‖ It varied also in her provinces. In some, and in some years, even so much that the born were twice the number of those who died.¶ In others, a less multiplying rate appears,** but as draughts to the army, and wanderers to the capital, and other emigrants take away a great many from the place of their baptism, the deaths on any local register do not mark their actual proportion to the births of that district.††

In other countries abroad we meet with diversities, yet always within the usual compass.‡‡

* This was in 1813. The births were 600,285, the deaths 603,025.

† See before, page 78, note †. So in 1832 the births at St. Petersburg were 10,167, the deaths 15,197.—Ritchie's St. Pet.

‡ From 1812 to 1822, all her births were 15,456,195, and all her deaths in those years 10,085,395, which leaves a surplus of 5,370,800 births.—Bull. Univ., 1827, p. 115.

◊ See before, p. 78. ‖ Ib.

¶ In the bishopric of Woronesk in 1824 there were 81,675 births to 38,060 deaths.—Hertha, 1825. In nine eparchies in 1823 the births were 529,427, the deaths 277,575.—St. Peters. Zeitschrift.

** Thus, in the government of Perm, from 1819 to 1824, whose population was 1,143,902, the births were as sixteen to ten deaths.—Bull. Univ., 1826, p. 136. Or four to two and a half. In the bishopric of Poltowa, 1824, there were 65,706 births and 47,561 deaths, or nearly thirteen to nine and two fifths, or about four and one third to three and one third.—Hertha, 1825.

†† From these causes I consider the deaths in the state of New-York and in the district of Quebec not to represent the true proportion of the deaths of those who are born in these places, because so many leave them to settle in the uncleared regions, where they assist to form new towns and states. Their numbers were—New-York in 1824, births 60,383, deaths 22,544.—Nat. Gazette, Feb., 1826. Quebec, 1794 to 1821, births 112,009, burials 54,534.—Bouchette, vol. i, p. 356.

‡‡ Thus in Baden in 1827 the rate was 1 in 41¼.—Bull. Univ., 1831, p. 49. At Montaux, in the Pays de Vaud, on the average of six years, 1826-31, the births were 62½ to 44¼ deaths in a population of 2833, or six *and a quarter* to four and four tenths, making an annual increase of 1 in

LETTER XIV.

Limitations of Population produced by the ordinary Laws of Death.—Statement of these as they occur in England and in several other Countries.

My dear Son,

Having thus surveyed the operations of death in various parts of the world, so as to be enabled to form a just conception of their usual results, let us make a few reflections on the facts and laws which we have been contemplating.

We see that the laws of death vary their effects as much as those of birth. There is nothing like a fixed standard, a uniform ratio, a one overruling law in either. Both the rate of deaths to births, and the proportion of the dying to the number of the existing population, are continually varying. They differ in every country in some degree, and in the same country at successive periods, and are not alike in every part of the same nation. These diversities show that the agency of death is governed by many laws and by no single force; yet here also, as in the births, all these variations are circumscribed by limits which, in the habitual and established order of things, are not overpassed, unless the Divine plan and will is that the particular population shall be extinguished or attenuated into a comparative nothingness. But even such debilitations are never produced by the usual course of births and deaths. They always arise from the sudden and temporary introduction of violent agents, either natural or human. Pestilence, famine, earthquakes, and inundations are the natural assailants which occur at times, in superordinary visitations; and wars of extermination are the human means by which depopulation, in particular cases, has been allowed to

152 only.—D'Ivernois, Bib. Un. Geneva. In the Pays de Vaud in 1825 the births were 4974, the deaths 3310, which was as five to three and one third.—Bull. Univ., 1826, p. 138. In the Netherlands the proportion was 1 in 44.—Quetelet. In Silesia, 1824, the births were 100,143, deaths 68,039.—Bull. Univ., 51. Nearly 5 to 3½. At Palermo, in Sicily, 1 in 31 from 1806 to 1815, and 1 *in 33 in the ten years* following.—Ib., 1827, p. 126.

be produced. But none of these instruments of destruction can be reckoned among the natural laws or causes of death. They belong to that part of the plan of the Creator which refers to his own government of human nature, and to the grand movements and revolutions which, in the execution of his purposes, he directs or produces in the natural history and fortunes of mankind.

A few reflections shall be submitted to you on this subject in a future letter on the providential empires that have appeared in the world. But at present our considerations shall be confined to the more natural laws and agencies by which death has acted, and is still acting upon us.

We have seen, from the limited portion of females who, from their suited ages, can in any year be mothers, and from the confining ratios of the births from these, that the number of the born is at all times circumscribed.* In all societies there can be only a certain proportion of births; and from the births thus limited the new generation, the succeeding population must come, as it has no other source.

The births, by these limitations on themselves, are always limiting the population they occasion; and death then comes to add a further limitation by his irresistible agencies. Thus all populations are confined and regulated by this double operation of the limits of laws, which are always acting expressly to this effect. Population exists nowhere without both these limitations, and its state everywhere evinces their effects.

As death takes away inevitably all that are born, the natural consequence of such a universal removal tends to be a prevention of all increase. And such would be the result, unless death was governed by laws always regulating it as to the proportion it shall in each state annually remove, and also as to the ages at which it shall withdraw this quantity.

For if death was suffered to destroy all before the parental age, mankind would be only a generation of children, extinguishing at their departure. So, if it take away every year as many as are born, the race would expire with the parents who suffered these privations, or never be more numerous. Hence the continuance and increase of all populations depend on the annual amount at which the rate of births exceeds that of death, and on the proportion which are taken

* See before.

away of the new generation before they enter into the maternal period and connubial state.

On both these points we find that, although there are many diversities in the minor degrees, yet in every country there are fixed circumscribing limitations. It is a law as to the ages, that from one third to one half of all that are born shall not live to the age of the possibility of being parents. They appear only as children, or in the first state of youth, and are then removed, manifestly for one reason, at least, that they shall not augment the numbers of the human race. This is a most important and ever-operating limitation of population, and by its universality and perpetuation, in every degree of civilization, shows that it has been made a law, with an express reference to this effect; for it keeps the peopling part of mankind steadily to one constant proportion of them.

The laws are so determinate, and, on this point, so efficacious, as to discover the plan and purpose of their institution. The maternal age is confined to a fixed portion of female life; and a constant proportion of both sexes are everywhere withdrawn before they can be parents—two expressive indexes to us how strictly population has been adjusted and is governed. Yet both these laws are so modified and so administered that they always allow, on the whole, a moderate and graduated increase.

The average ages of human deaths disclose to us some of the laws by which our mortality is specially regulated, and therefore I will state to you what I have noticed on this subject.

Out of nearly 4,000,000 of both sexes who were buried in eighteen years in England and Wales, almost four ninths of the males died under sixteen years of age,* and half of them died between twenty-three and twenty-four.† Thus the law of death prevented entirely the first portion from being fathers; and, according to the usual rate and habits of men's marrying in England, took away one half of the born males before they could enlarge the population of mankind. This law confined it, therefore, to arise from the other half; and of these, from so many as should choose to marry.

* Of 3,938,436 persons who were buried between 1813 and 1830, the males were 1,996,195. Mr. Rickman has classed these into their ages. The number of them who died under sixteen was 885,722; four ninths would have been 887,200.

† The buried under twenty-four were 1,001,148; one half would have been 998,097.—Pop. En. Abst., vol. i., p. xxxvi.

If, from the general average of the nation, we turn to the proportions as to the males in each county, there we find the same diversities, though always within a restricted compass, as attend all the operations of the laws of population, so far as their established limitations allow.*

In our great metropolis the rates also vary; but from two fifths to one half were every year found to be dead by twenty years of age.†

Of the females who died in England and Wales during the eighteen years above mentioned, less than two fifths died under sixteen.‡ Thus our general conclusion may be, that from four ninths to one half of our males, and two fifths of our females, constitute the general average portion which death is yearly taking away, so as to prevent them from being the parents of any new generation.

In other countries, laws as restrictive, and in some more largely thus operating, are likewise acting to limit the number of the producers of the populations that succeed each co-existing race. These will show us what a powerful and sustained system has been established, in the natural course of things, to keep every nation in that state and within those numbers in which, from time to time, it is subsisting.

The causes everywhere are in action which produce the re-

* Thus, of those buried in Bedfordshire in the eighteen years, one third died under four, two fifths under eleven, four ninths under eighteen, and one half under twenty-six.—Pop. En. Abst., vol. iii., p. 6. In Berks, one third died under six, two fifths under eighteen, four ninths under twenty-four, and one half under thirty-two.—Ib., p. 16. In Cambridgeshire, one third soon after two years, nearly two fifths under five, four ninths under ten, and one half under nineteen.—Ib., p. 32. In Lancashire, one half of the males died in seven years. These counties will serve as a specimen of the provincial differences in their local rates of mortality—one half dying so variously at the years seven, nineteen, twenty-six, and thirty-two.

† According to the bills of mortality in 1818, one third died under five, four ninths under twenty, and one half under thirty. In 1824, nearly one third died under two, and above half at twenty. In 1832, one third, with the stillborn, did not die till just above five years, two fifths were dead at twenty, but not one half till thirty years had elapsed. In 1833, one third died under four, above four ninths under twenty, and one half under thirty. In 1835, one third were dead by four years, and nearly one half under twenty. In 1836, one third were not dead till seven years, two fifths by twenty, and one half not till thirty-three.

‡ The females were 1,942,301. Of these, 767,317 died under sixteen; two fifths would have been 776,920. Rather above half, or 975,034, died under twenty-nine.—Rickman Pop. Abst., vol. i., p. xxxvi.

sults intended, in accordance with the Creator's plan, for each country. We see their operation in their effects, but have not yet acquired the knowledge to distinguish with any certainty what they specifically and precisely are. Our suppositions about them are but guesses, and fail to account for the phenomena that occur.

In Venice half of the born depart before they have breathed ten years on earth.* At Odessa the mortality is still more rapid, nearly two thirds are dead by the age of three years.† In the general empire of Russia the operations of the mortal agencies exhibit some peculiarities which are striking.

Above half of the born die before the age of fifteen ;‡ but in some of its provinces the far larger proportion disappear under five years of age ;◊ in others, the greater mortality occurs between five and fifteen.‖

In the deaths which occurred in Saxony in the successive years 1832, 1833, and 1834, much above half were under six years of age, increasing in each census.¶ But the greatest proportion of the other moiety attained a fair old age.**

One third of the dead in Russia have lived from fifteen to sixty, dying off in the intermediate years in portions very often approaching an equality ;†† but this one third comprised

* Mr. Drinkwater stated to the Statistical Society, from Signor Quadri's Tables, that in Venice one eighth die on the day of their birth, one fifth within a month, one third within a year, and a half before the tenth year is completed.—Athen., 1835, p. 113.

† The population here was 50,312, and the average number of annual deaths, calculated on the four years from 1824 to 1827, were 1378, of which at one month died 615, and from one to three years old 270 more. —Mr. Preston, ib., p. 267.

‡ Bull. Univ., Sept., 1830, p. 382. "If it were not for the extreme fecundity of the mothers, and the frugality and robust constitution of those who survive and are hardened to the climate, Russia would in time be depopulated." "The mortality under fifteen is greatest in those eparchies, Vialka, Kief, Perm, Tobolsk, and Nizni Novgorod."—Mr. Preston, Athen., 1835, p. 267.

" Of every 1000 of all ages who died under fifteen were 691 at Nizni Novgorod, 656 in Tobolsk, 648 in Perm, 619 in Kief."—Ib.

◊ " Of those who died under fifteen, 933 in each 1000 died under five at Nizni Novgorod, 922 in Tobolsk, 920 in Perm."—Ib. ‖ Ib.

¶ The dead in 1832 were 47,298. Of these, the number stillborn and under six were 24,068. In 1833 the numbers were 50,103 and 26,199 ; in 1834, 50,241 and 27,676.—Mr. Preston, Stat. Soc. Abst., 1836, p. 289.

** Thus the numbers that survived forty were in each year above a third of those who died, as 16,611 in 1832, 16,526 in 1833, 15,926 in 1834. —Ib.

†† Mr. Herrmann has classed and reckoned these portions with great

the whole parental reproducers of the nation. So that, although Russia is frequently prolific in offspring, and has been an increasing population, yet the laws of death in her territory so actively circumscribe its successive amount, that she is never able to overflood herself nor to overwhelm her neighbours with it.* A guardian care keeps each nation, as to its numbers, in due harmony with every other. Russia is a strong instance of this political fact; for by those laws not more than one third of her population is, at any time, the largest part which is in an effective state, or which can be at all annoying to other nations, extensive as her dominions and superior as her mere numbers are.†

accuracy. He has found, that out of every 1000 men who were dead in Russia in the fifteen years he examined, 311 died between the ages of fifteen and sixty; and that the proportion of the intervals was 89 between fifteen and thirty, 102 between thirty and forty-five, and 120 between forty-five and sixty.—Herrmann's Données Statiques, Mem. Acad. Petersb.

* It may be useful to notice some of Mr. Herrmann's facts, as they are little known.

Of 808,962 who died in Russia from 1798 to 1804 between the ages of fifteen and sixty, and of 1,055,977 between 1805 and 1814, there died at—

	FIRST PERIOD.		SECOND PERIOD.	
Young persons:				
From 15 to 20	76,229		90,302	
" 20 to 25	79,156		99,760	
" 25 to 30	86,923		110,900	
		242,308		300,962
Complete men;				
From 30 to 35	76,695		103,578	
" 35 to 40	94,788		126,498	
" 40 to 45	86,456		119,984	
		258,139		350,060
Aged:				
From 45 to 50	105,664		140,094	
" 50 to 55	84,445		120,222	
" 55 to 60	118,386		144,639	
		308,515		404,955
		808,962		1,055,977

Herrmann's Données Statiques, Mem. Acad. Petersb.

† Mr. Herrmann thus classes the dead from fifteen to sixty for the year 1825:—

Young persons:		
From 15 to 20	13,356	
" 20 to 25	14,427	
" 25 to 30	14,048	
		41,831
Mature men:		
From 30 to 35	12,997	

At Hamburgh, nearly one third died under two years of age; but almost one half had lived till thirty.*

In Saxony, the mortality operates most largely on the youngest. Three eighths of the born in 1832 were dead under one year of age;† above half were dead by six years of age;‡ and almost four sevenths by fourteen; a proportion which was completed at twenty.§

Life then became more prolonged; but these operations reduced the parental possibility to one third alone of the new generation.

In Frankfort, on the average of twelve years, three sevenths of the males and two fifths of the females died under twenty years of age.‖

From 35 to 40	13,549	
" 40 to 45	15,377	
		41,813
Aged:		
From 45 to 50	16,839	
" 50 to 55	17,488	
" 55 to 60	15,224	
		49,551
		133,195

Herrmann's Données Statiques, Mem. Acad. Petersb.

* Of 1000 who died at Hamburgh, 316 were under two years and 519 were under thirty.—Bull. Univ., 1830, p. 237.

† I quote from Mr. Preston's statement to the Statistical Society in April, 1836.

The deaths in 1832 were 47,298. Of these, the stillborn and those under one year amounted to 17,668. One third would have been 15,766; three eighths, 17,736.

In the next year the deaths were 50,103. Above three eighths of these died under one year, 19,509; three eighths would have been 18,793.

In 1834 the effects were more fatal. Of 50,241 deaths, nearly three sevenths were dead under one year, being 21,206. Three sevenths would have been 21,533.

‡ In 1832 the dead under six years were 24,068; one half would have been 23,649. In 1833 the deaths under the same period were 26,199; one half would have been 25,051. In 1834 the dead under six were 27,676; half would have been 25,120. The amount was in this year nearly five ninths, which would have been 27,913.

§ In 1832, under fourteen, 26,266; under twenty, 26,961. Four sevenths would have been 27,030. In 1833, under fourteen, 27,747; and under twenty, 28,552. Four sevenths would have been 28,632. So in 1834 the dead under fourteen were 28,177, and under twenty, 29,096. Four sevenths would have been 28,710.

‖ The dead from 1817 to 1828, at Frankfort-on-the-Maine, were 6813 males and 6625 females. Of these, 2915 males were dead by twenty, and 2667 females. The three sevenths males would have been 2921, and the two fifths females, 2650.—Bull. Univ., 1831, p. 49.

These instances will suffice to lead us to an adoption of the principle that the laws of death, in their general operation in all countries, according to the established agencies and course of nature, confine everywhere the renewal of the population, and all increase of it, to a portion alone of the newborn, and that this portion is not more than from one third to one half of each living generation. It is most frequently nearer the one third; but from these must be deducted those who become too old to be parents; and for this deduction from one fourth to one fifth may reasonably be allowed. Death is thus used as an instrument of limitation to adjust each population to the other, and to keep every nation in its intended condition for the time being, and to adapt and prepare it for its further destinies. Its graduated varieties within these circumscribing limits afford all the scope and means for these modifications that the purpose and emerging circumstances require.

But these laws and their governed applications preclude the possibility of the geometrical increase of mankind, and have never suffered it to take place. They have hitherto kept the numbers of all coexisting generations in that state which has been successively most expedient for them; and until these laws and these ratios and agencies are changed, we need never fear a superabundant population in the world. But none can alter them except their Author, and when he changes them his wisdom and benevolence will make the mutation no disadvantage to his human race.

LETTER XV.

Other Laws of Death.—Mortality increases as Births increase.—Apparent Connexion between the Times of their Occurrence.—Relation between Deaths and the Price of Food.—Effect of Climate and Soil.—Results of Childbirth.—Reflections on Infant Deaths.

My dear Son,

There are a few other laws of death, to which I can but cursorily allude, as I am only taking those general views of this—as of my other great subjects—which will indicate the system and explain the principles of the sacred history of the world without that full investigation of any which their complete elucidation would demand.

I am rather seeking to open the paths and direct the observations of my young contemporaries to the themes which deserve their attention, than to furnish them with that plenitude of knowledge on each object of our inquiry which their love of truth and rational views will desire; but which would not suit the purpose of these letters, if I were able to provide it.

One of the most remarkable of these laws, though at present a very mysterious one, is the connexion which there seems to be between the number of births and deaths with respect to each other. There are some grounds for thinking, that as the one increases the other also multiplies.

More deaths are accompanied with more births in any given period, and more births with more deaths. The French economists and Mr. Sadler have pointed out this interesting fact. None can explain what it is that links them together; and I can only notice the few facts that I know which seem to imply it.

But it deserves your attention, if it be found to prevail to any extent, as another testimony, how very determinately and carefully the production of life and death has been regulated and adjusted to each other. If they be thus promotive, and, when occasion requires, corrective of each other, the plan of both has been very deliberately and sagaciously arranged, and is well worth the attentive study of those who have sufficient leisure and inclination to pursue this curious train of inquiry by an extended investigation.

The fact has appeared at Maurienne, in Savoy.* In Normandy, births and deaths increased as either were more numerous.† In the Netherlands there were the greatest number born where the greatest number died.‡

* In the lower districts, the movement of the population is more rapid and life shorter than in the more elevated regions. At Maurienne, the births and deaths for twenty years were as to 1000 in these proportions:—

	ALPIN PART.	MIDDLE.	LOWER.
Births	602	638	684
Deaths	462	524	660

Bull. Univ., 1831, p. 256.

Here the deaths increased as the births increased, but in a larger degree.

†

	1801.	1811.	1819.	1822.	1826–1830.
Births	63,576	62,606	69,631	62,276	65,105
Deaths	51,595	52,566	59,653	58,325	60,307

D'Ivernois.

Thus, in Zealand, *the ratio of* births was one in twenty; in

The same months in the year are also alleged to have the greater or lesser amount of births and deaths.* At Frankfort, more births and more deaths occurred together, and more marriages also.† In Russia, deaths and births alike multiply,‡ as before noticed.

Our factory counties likewise seem to multiply both their births and their deaths by the concurrence of their extraordinary proportions; but I have not time to go through the proper calculations now, so as to ascertain the degrees of certainty in which this takes place.§ The more deaths, in

North and South Holland, one in twenty-three; and the deaths one in thirty-one, thirty-four, and thirty-five; while in other provinces, as in Hamburgh, Antwerp, and Groningen, the ratios of births were twenty-nine, thirty, twenty-eight, and of deaths forty-seven, forty-eight, forty-nine. Hence the inference that "the births are in a direct ratio to the mortality."—Bull. Univ., 1827, p. 92.

As compared with France—	BIRTHS.	DEATHS.
In the Pays Bas	468	398
France	426	400

Ib., 1830, p. 232.

* "M. Quetelet has verified the fact, even in the different months of the year, as he showed in his memoir on the mortality of Brussels; and M. Lobatto observed it in Amsterdam, Antwerp, Ghent, Rotterdam, and the Hague."—Ib.

"The maximum and minimum of deaths and births were in the same months." These were found to be at Brussels in eighteen years, and by Lobatto in the five cities, thus:—

	BIRTHS.		DEATHS.	
	BRUSSELS.	LOBATTO.	BRUSSELS.	LOBATTO.
December	1017	1007	1172	1129
January	1040	1056	1172	1206
February	1157	1120	1109	1109
March	1099	1099	1100	1057
April	1079	1053	1068	1021

All the other months were less than 1000 of each. In July the least of either occurred, being births, 912; deaths, 857.—Ib, p. 92.

† The series of births and deaths in this city for twelve years were—

	BIRTHS.	DEATHS.		BIRTHS.	DEATHS.
1817	1108	1136	1824	1046	1053
1818	1134	1188	1825	1062	1081
1819	1186	1209	1826	1064	1301
1820	1190	1163	1827	1064	1094
1821	1092	1012	1828	1070	1020
1822	1028	1088		13,065	13,428
1823	1021	1103			

Ib., 1813, p. 50.

‡ See before, p. 78.

§ The Parliamentary Report on the Factory System has, in its Appendix, a table of the comparative *duration* of human life in different places *in* England; the result is, that in every 10,000 persons who were buried *there died*—

these cases, seem to arise from the larger mortality of young life.*

The curiosity of the inquisitive has been even extended to mark the hours of the day in which the different portions of deaths occur.

In the note I will insert what was observed in twelve years at Brussels,† which is said to correspond with the experience at Paris.‡

It was found, on considering what occurred at Hamburg, that more died and were born between midnight and the sixth hour following, than in any other part of the day.§ In Italy, the mortal agencies affect those most numerously who are born in the winter months, as if the winter season was most unfa-

	Under twenty years old.	Under forty years.	Forty and upward.
In a *healthy* county	3756	5031	4969
In a *marshy* county	4279	5805	4105
The metropolis	4580	6111	3881
City of Chester	4538	6066	3934
Norwich	4962	6049	3951
Carlisle (formerly)	5319	6325	3674
Carlisle (now)	5668	6927	3071
Bradford (worsted-spinners)	5896	7061	2939
Macclesfield (silk-spinning and throwing)	5889	7300	2700
Wigan (cotton-spinning)	5011	7117	2883
Preston (ditto)	6083	7462	2538
Bury (ditto)	6017	7319	2681
Stockport (ditto)	6005	7367	2633
Bolton (ditto)	6113	7459	2541
Leeds (woollen, flax, and silk spinners)	6213	7411	2559
Holbeck (flax-spinning)	6133	7337	2663

Thus, about as many died *before* twenty where the factory system prevails as *before* forty elsewhere.

* "A rapid increase of population infers the birth and existence of a large proportion of infants; and therefore a large proportion of short-lived persons, thereby accelerating *pro ratâ* the time of life or age at which one half of the population collectively are dead."—Rickman., vol. i., p. xlvi.

† The deaths occurred at the following hours:—

HOURS.	MORNING.	EVENING.	HOURS.	MORNING.	EVENING.
1	228	257	7	217	204
2	253	233	8	248	194
3	230	217	9	207	198
4	242	237	10	228	226
5	231	281	11	311	243
6	213	233	12	110	140

Bull. Univ., 1831, p. 50.

‡ Ib. § Fer. Bull. Univ., 1832, vol. ii., p. 237.

vourable to babe life.* As between the rich and poor, it appears that, after the age of twenty-five, the wealthier class have the longest comparative life.† As more males than females are born, so more males die within any given period.‡

The effect of the price of food on deaths has been also considered. Mr. Sadler admits that marriages sometimes increase where wheat is cheaper, but denies an augmentation of births.§

One inquirer into the value of human life concludes that a

* Dr. Treviranus found, that of 100 born in the winter months of December, January, and February, 66 died in the first month, 15 afterward, and that only 19 survived the first year. Of 100 born in the spring, 48 survived the first year, and 83 of those born in summer, and 58 of those born in autumn.—Lond. and West. Review, No. 16, p. 251.

† The comparative mortality from 25 to 80 between the rich, and poor, and the general state, has been thus distinguished :—

	RICH.	POOR.	COMMON.
25 to 30	0·00	2·22	1·41
35	0·85	1·43	1·56
40	1·20	1·85	1·71
45	1·95	1·87	1·91
50	1·59	2·29	2·21
55	1·81	2·58	2·63
60	1·68	4·60	3·39
65	3·06	5·76	4·41
70	4·31	9·25	5·85
75	6·80	14·14	7·80
80	8·109	14·59	10·32

Bull. Univ., May, 1830, p. 301.

At Baden it was ascertained that the richest of its circles was the least increased in population.—Ib., 1831, p. 44.

‡ All the burial accounts prove this fact. The registered deaths for eighteen years, from 1813 to 1830, were, in England and Wales—

1,996,195 males; 1,942,301 females.

Rickm., vol. iii., p. 487.

In the ten years between 1821 and 1830—

1,251,105 males; 1,211,802 females.—Ib., 486.

Russia, in 1834—

Male deaths, 657,822; females, 633,176.

Journ. Petersb., 12th March, 1836.

Denmark, in 1830—

16,296 male deaths; 14,998 females.

Porter's Stat. Society.

§ On this point Mr. Sadler disputed Mr. Milne's conclusions, that an increase of food and a reduction of its price not only promoted marriages, but made the children more numerous.—Vol. ii., p. 225. His 15th chapter is directed to show that it is not true that man breeds up to the level of his food, and that he multiplies in proportion as it becomes cheap and plentiful.—Vol. ii., p. 236–55. He thinks that, although ease and affluence increase with increasing numbers, yet they diminish the prolificness, and thus limit the multiplication of mankind.—Vol. ii., p. 355.

moderate price has been most favourable to it;* another has calculated that low prices are injurious to the poor, especially in the agricultural districts; while high ones are most disadvantageous to the manufacturers.† But these topics concern rather the relation and the conduct between man and man, and the proper legislation or regulations with respect to them. Providence commands the supply to arise from its general surface alike, whether spinners or ploughmen inhabit it. He gives to all, and leaves it to ourselves to take, apply, partake of, and distribute.‡

It has been discussed what effect locality, and climate, and civil institutions have on human life and fertility.

* Mr. Milne, in his "Treatise on Annuities," infers that fewer die when wheat is not too low nor too high. Too high a price causes a scarcity; and a too low one, a want of sufficient wages or employment. He compares the prices of a quarter of wheat with the mortality that occurred under them, and thus calculated the results:—

Under 40 shillings	1 in 37 died.
From 40 to 50 "	1 in 39
50 to 60 "	1 in 41
60 to 70 "	1 in 46
70 to 80 "	1 in 45
80 to 90 "	1 in 50
90 to 100 "	1 in 50
Above 100 "	1 in 43

† Mr. Bain has calculated the burials in each million of population, upon an average of forty years, from 1780 to 1820, and compares them with the prices of wheat a quarter, and deduced these results:—

Wheat.	Burials in Seven Manufacturing Counties.	Burials in Seven Agricultural Counties.
Under 40 shillings	21,430	25,165
From 40 to 50 "	22,364	23,112
50 to 60 "	21,030	21,181
60 to 70 "	20,358	19,700
70 to 80 "	19,502	18,925
80 to 90 "	19,873	17,550
90 to 100 "	19,206	17,417
Above 100 "	23,780	20,486

‡ The general average of the relation between the prices of wheat and the number of deaths has been thus reckoned on a million of the burials which occurred between 1793 and 1820:—

Under 50 shillings	21,860 burials.
From 50 to 60	20,618
60 to 70	20,030
70 to 80	19,502
80 to 90	19,873
90 to 100	19,206
Above 100 shillings	23,780

Metrop. App., 1835, p. 338.

Mr. Sadler infers that population lessens as it becomes condensed, and is lower in mountainous countries than in plains, and in the frigid than in the temperate regions of the globe.* A French gentleman, who has ably investigated the subject, decides justly, that population is not confined to any one law,† and that soil, climate, and temperature have no direct action on the intensity of the productiveness, except, in particular cases, from the particular causes which he enumerates.‡ He ascribes great influence in this respect to sufficient and regular employment,§ especially under a mild and free government;‖ justly connecting the laws of our increase with our social and political meliorations.¶

Another limitation of the maternal supplies to population takes place in that diminution of the producers which attends the very period of the arriving nativities. From the London bills of mortality, this would seem to occasion a deduction of portions which vary from one eighth to rather more than one twelfth of those who die that could be mothers. This occurrence, by withdrawing so many of the essential fountains of our earthly being, is a proportionate preventive of the overwhelming excess which has been so seriously dreaded.**

* Sadler, vol. ii., p. 352–4.

† M. Benoiston de Chateaunef's notice on the intensity of population was read in the Acad. de Sciences, 23d Oct., 1816. He says "that neither the births nor deaths follow a law common to every country; the proportion varies from people to people; from canton to canton; from town to town."

‡ Ib.

§ "To have work is to have the means of living. Hence, in manufacturing places, where there is a continual demand for labour, the population is in general numerous."—Ib.

‖ He adds:—"There are not numerous births among a poor or oppressed people, or where they are deficient in agriculture, industry, or liberty. Hence *slave populations* diminish."—Ib. It was an ascertained fact, that in St. Domingo, in 1788, three black marriages gave only two children, while every white one had three.—Page, Traité du Commerce des Colonies, p. 218.

¶ "These modifications of the population, as well as those of marriage and death, are strictly connected with the state of man in society, and are a certain indication of the goodness of these institutions, and of their degree of civilization."—Fer. Bull. Univ., 1827, p. 17.

** I ground the calculation on six bills of mortality now before me for the years 1818, 1824, 1832, 1833, 1835, and 1836; taking from each of these the numbers of both sexes who died between fifteen and forty-five as all who could be mothers, as nearly as they can be calculated, and considering one moiety of these to be females, as the total amount of all shows *that they* were only a little less than that portion, I find these results:

No well-constituted or rightly-educated mind will be alarmed by the knowledge of such a possibility; for it is to the honour of the female spirit, and one of its greatest moral beauties, that it cherishes those religious sensibilities which impart a consolation, a confidence, and a well-grounded hope of protecting succour, that peculiarly avail us when human assistance cannot benefit. But such events are quite sufficient to make both parents receive the safe delivery as a providential blessing; to seek for it as such with judicious foresight; and to express for the happy issue a grateful acknowledgment. All ages have felt the wisdom of such conduct, and the need of Divine favour and propitious aid on such occasions. And if pagans thought it necessary, or that it would be useful to resort to their Lucina and Illythia, and other imagined beings, with supplications and thanksgiving, the Christian mother will not be less earnest to testify to the Divine reality whom she adores the gratitude she feels for the blessing she has received.

All establishments and varieties of our Christian faith have, I believe, some sacred ceremonial of this sort: for it is one of the desires of the human heart to have the means and the opportunity of giving voice to its thankful emotions when it receives benefactions from the guardianship it hopes for. It will be always rational, and, indeed, a duty, to use, with steady calmness, every preceding care; and to confide without apprehension in the professional skill which may be selected. Yet the great palladium which, on these and on all momentous emergencies, should be secured, as the most certain protection, is that support and benediction which is very rarely, if ever, solicited in vain when the heart petitions for its boon; and when the mind believes that, what it deferentially asks for, will, unless wise and kind purposes avert it, be graciously bestowed.

In every country, the laws of death have been permitted or appointed to take away very largely the new comers in their baby state. One third die, in some countries, in their first

1818. Died in childbed, 221; the females between fifteen and forty-five were 2254; proportion, 1 in 10 2-3.
1824. Died 199; females, 2013; nearly 1 in 12.
1822. Died 343; females, 3531; 1 in 10 2-7.
1833. Died 275; females, 2858; 1 in 10 1-3.
1835. Died 277; females, 2193; not quite 1 in 8.
1836. Died 172; *females, 2138; 1 in* 12 2-5.

year, in others before two years, in ours nearly under three. As knowledge increases, and parental judgment improves, and the desire to rear the offspring enlarges, and the dread of inability to maintain them lessens, and more care is therefore applied to preserve them, this very early mortality will be much diminished. Yet it seems too great to be entirely prevented by any human efforts. It has the appearance of being one of the constant laws that are at present attached to our parental system.

This dispensation is one of the afflictions which has been assigned to accompany the present state of our existence; but it leads us to recollect that the spirit of life is not extinguished by earthly mortality. It is only born here to reside also elsewhere, and the action of death is but a removal of it to another locality; so that, as far as it concerns the individual soul, it can make little apparent difference to that whether it passes its being in this world or in another. As, while it is in being, it must exist somewhere, its removal by death only changes the scene of its consciousness; and when this occurs in infancy, the transfer is effected before its young affections have become much developed, and while its actual place of being must be most indifferent to it. If it departs from parental attentions here, to which its birth entitled it, it is still under the care of its best and greatest Parent, and cannot, therefore, be in any way injured by the change of its place of being.

We know not where this precisely is, or in what society it passes; but we may be certain, from the manifest benevolence and assured kindness of our Almighty Benefactor to every unoffending human creature, that the removal never will be to the disadvantage of those who are thus removed; and their disappearance, with the conviction that they are living happily in some other region of being, will then be a means of extending our thoughts and affections from our temporary world to those grand future destinies which we are exhorted never to forget.*

* The Rev. T. Dale, in his pleasing poem on the Death of the Last Child, has consoled himself with views of this description, which it may be soothing to others to read and think of.

Farewell, my young blossom!
The fairest, the fleetest;
The pride of my bosom,
The last, and the sweetest.

On thee my heart centred
All hopes earth could cherish:
The spoiler hath enter'd,
And thou too must perish!

I see thy bloom wasting,
And cannot restore it;
The end now is hasting,
'Tis vain to deplore it.
Could prayers detain thee,
As pale thou art lying,
I would not enchain thee
To live, ever dying:

To linger—to languish—
That life may be sorrow!
Through the night pain and anguish,
No rest on the morrow!
Oh! soon may deep slumber
In mercy steal o'er thee!
Earth can but encumber,
And heaven is before thee.

Oh loveliest! oh dearest!
When anguish oppress'd thee,
My arm still was nearest,
My prayer still hath bless'd thee;
But now all is ended!
How welcome that sighing!
My prayer has ascended!—
'Tis heard—she is dying!

My God! I adore thee!
Receive the freed spirit
In gladness before thee,
A crown to inherit.
Take the gem that thou gavest,
Take the flower thou dost sever;
Take the soul that thou savest—
It is THINE and for ever!

Christian Keepsake, 1837.

LETTER XVI.

Sketches of the Plans and Principles on which Population has been conducted; and of the Purposes which are effectuated by it.—It never has been injurious to Society.

My dear Son,

Having gone through our statistical examinations of the natural laws and experienced course of human population, we may proceed to reason on the Divine plans concerning it for which we have laid the preceding foundation.

From the historical information which we possess of the state and transactions of the world before we were born, we are entitled to conclude that it has been, from the beginning, decided by our Creator that mankind should multiply, from the few survivers of the deluge, into their present numbers by slow and varying gradations and in separate populations. They have branched off from their original stocks and from each other into numerous distinct settlements or into migrating tribes, of which some have become nations more or less lasting. From the results we may infer that it was his intention that human nature should exist upon the earth in this condition; and should have their various transactions with each other as amity and hostility which the annals of each nation record.

It is clear, from what has taken place, that no irresistible, or unchangeable, or ungoverned law of population has ever operated or displayed itself in any part, and never in the geometrical ratio; but that, in all ages and nations, the multiplication of mankind has been permitted or conducted under special laws and to special results, peculiar, not to each territorial region, but to each aggregation of human society that has spread and settled in its habitual locality.

We perceive, from the history of each nation, that it has never been in any unceasing course or ratio of augmentation or decline, nor fixed in any stationary pause. If a stationary law had been made the permanent rule, mankind could not have multiplied from the time of its promulgation. But we perceive that they have enlarged into their present state. Therefore, no paralysis of this sort has been imposed upon them.

Neither has the resistless law of any augmenting ratio, much less a Malthusian ratio, been enforced upon them, for then they would have soon overwhelmed the earth, to the incalculable, or, at least, incomprehensible numbers to which a former letter has alluded.

As little has any law of decline, devastation, or misery been inflicted on human nature, for then every tribe and kingdom would have long since gone to waste, and mankind would have ceased to be a living order of beings in the universe many centuries ago.

Instead of either of these laws having been made the rule and governor of human life, the system has manifestly been that *all* should be occasionally used—that each of them should act in the course of human life, but that the agency of each should be regulated and guided by the wisdom of their Institutor, so as to execute his plans and accomplish his purposes in his administration of human affairs, and in effectuating the ends which he has designed that every nation should promote, and which the process that he is carrying on is still operating to accomplish. On this plan the populations of Europe have been sustained; often kept stationary; and rising again by ratios never uniform, but not advancing with a measured progression.*

According to these plans, he has caused some populations to grow up and decline; others to become stationary; others to advance; and all to undergo those alterations and vicissitudes which it suited his great purposes that they should experience. Population has nowhere been left absolutely to itself; he has given it room and license to vary, as human will and causes affected it, within the limits which he has, by his constitution of nature, presented to it. But within these limits his guidance and control have been always actively provident and directing. The elements of our life have been al-

* The slow and gradual multiplication of mankind appears in the fact mentioned in the periodical papers of the day which have just come before me, January, 1837.

The "Moniteur" contains a table of the population of FRANCE for 1836, which is stated at 33,540,908, being an increase since the last census in 1831, mentioned before, p. 72, to have been 32,560,934, of 9974.

Thus one of the most civilized nations of Europe, in full peace and prosperity, has increased less than a thirty-third part in five years; consequently, at this rate, would not be doubled in a hundred and fifty years, supposing that the same augmentation continued undiminished for all that period.

ways under his superintendence, and have always taken course which his purposes have required. Hence every tion exhibits a special and peculiar series of result, both its coexisting numbers and its social state. Those w once flourished have at length disappeared, as his plan pointed; and those which are now prominent have arisen their present multitudes and history by no fixed law or whatever, but by those graduations, suspensions, alternat and successions which each displays to the observing j ment.*

The Divine plans as to each particular population mus sought and studied in its particular history; and with lights afforded by this, in the bearings and connexion of the transactions and states of the other nations with whi has been concerned; extending, likewise, tho observatio the condition and course of the rest of the contemporary w and of the future events which it has more remotely con uted to effect; for the plans and agencies of Providence framed on a large scale, and with long, and expansive, numerous consequences.

* About 200 years ago, Olaus Rudbeck, in his "Atlantica," bo of the prolific nature of his Swedish countrywomen. He thought to be one of the distinguishing natural advantages which Sweden wa joying; yet notwithstanding the fact, of which he gives instance unusual increase has multiplied the population of Sweden. On contrary, we see in the following series the same gradual incr which seems to have been the most general law in Europe during last century, and which confirms the view we have taken of the laws of population and their natural results. The Col. Carl. af Fo in his "Statistik von Schweden," presents this statement to us, valu for the length and continuity of the series, being eighty years:—

In 1751 the population amounted to	1,785,727
1760	1,893,246
1772	2,012,772
1780	2,118,281
1785	2,142,273
1790	2,150,493
1795	2,280,441
1800	2,347,303
1805	2,419,772
1810	2,377,851
1815	2,465,066
1820	2,584,690
1825	2,771,252
1830	2,888,082

At this rate, Sweden would be 100 years in doubling its populat *if it continued* in a similar augmentation.

According to all these relations has the population of every society been regulated and conducted. What has been may be expected to be repeated in the principle of the direction, and will so continue, always with reference to each part and to the evolving future. We seem disparted from each other, and are in frequent competitions and alienations, never thinking that, as nations, we have any affinities with each other. But these are human feelings and prejudices. We are all members of one earthly family in the view and meaning of our Creator. We are associated together, and regarded as one race and order of beings in his mind and plans; and in these all the generations that appear and depart are likewise connected together. Our personal interest with our world and with each other cease on our individual death, as the particles of our own body separate from us to be replaced by others. But every new generation and all their individuals are, in his sight, but so many successive portions of one human nature, of one great order of human being; one expansive, growing, fertilizing, fructifying, and improving mind, existing in millions of individual frames, and acquiring in each ideas and qualities which others are without; but all still the diversified compartments of one great scheme and theatre of existence, whose final state seems likely to be the concentration, in the last populations that shall possess the earth, of all the attainments and improvements which all their branches and predecessors may have acquired. This collective concentration of the past and present, in the individual mind that chooses to lead an intellectual life, is already largely taking place; and our many scientific, literary, political, commercial, and civil associations of all sorts, are each contributing to this result. Inquisitive persons are becoming more the real little worlds, the microcosms which they have been rhetorically said to be. But what was once a mere verbal compliment to human nature is very much, even now, its actual character in many. Nor does any diminution of the aggrandizing effect seems likely to accrue to a posterity which will both emulate and surpass us. No one, indeed, can live now without enlarging in his intellectuality. We must improve, in some respect or other, whether we seek to do so or have no thought about it; such is the operation of the circumstances into which human life is thrown, and by which society is now generally affected.

The expansions or contractions of our various populations have been always governed on these principles. The agencies are invisible, but their effects appear in the results which are successively educed. At present an augmenting influence has been given to them; but even this is acting with a moderation in its impulses which implies a directing regulator. Our own numbers seem to increase most largely; and when we advert to the fact that we are now the most colonizing nation in the world, we see an intellectual connexion of design and execution between this political tendency and our national multiplication.

The English, Scotch, and Irish populations are at present led to be the greatest settlers of the distant and less cultivated regions; and they carry Christianity, morals, arts, literature, science, manufactures, commerce, taste, industry, good feeling, and good sense wherever they enter and inhabit.

Their increased multiplication bears a coeval date with these increasing colonizations; and I cannot but infer that there is a mutual relation between them. The coincidence corresponds with the supposition, and indicates the purpose from which it originates. So, in ancient times, the multiplying nations were the founders of new states, and were urged by their increasing numbers to be so. But when these great objects were accomplished, we hear no more of their exuberant populations which had occasioned their movements. The augmentation was imparted to induce and enable them to perform what they were appointed to effectuate; and then the more stationary laws came upon them, because the existing ones had ceased to be necessary, and would, by their continuance, have been pernicious.

Let us, then, regard the populations of the world as actors and instruments in a great providential drama, moving, with all the scenes that surround them, to accomplish in due order and succession what the Divine Author and Inventor of the universe has conceived as to our earth, and is, in their transactions and revolutions, proceeding to occasion and complete. His plans are always moral and intellectual, and are devised and put in execution to produce moral and intellectual results. He is a moral and intellectual being in the most absolute perfection; and he has created us with a nature, and endowed *us with a* capacity, to which the same epithets are applicable;

but which must be trained to acquire the qualities and excellences which appertain to such a being. From these considerations we may infer that one of the chief purposes of such a Creator as to us has been, and continues to be, to moralize and intellectualize our improveable spirit into all the improveabilities of which it is susceptible. The process he has been pursuing to this end has already worked out results which have enriched our nature with wonderful acquisitions. Man is now what man never was before. Nations, like some of those which now are flourishing, never did or could appear on earth in ancient times or in preceding ages. His plans and agencies are still in full operation, to extend, and refine, and multiply the astonishing produce which is everywhere emanating from human talent and industry.

What he has already done for us all, and inspired and assisted all to attain and accomplish, demonstrates that mankind are a highly-favoured portion of his intelligent creation; and it will be our own fault if his benefactions to us, even in this world, are not greater and more universal to our various classes than those we have already experienced. The bounty of Omnipotence has no limit to the possibility of its diffusion; but it requires a fitness to receive before its munificence can be enlarged. The more we increase our capacity to be blessed, the more benedictions he will be desirous to grant to us. Such a parent will never confine his progressive blessings to those whom he has already so distinguished, if they will be as grateful for the gift as he is willing to give. His kindnesses will never lessen, if we be as attached and as obedient to him as he desires to be benign, and generous, and affectionate to us. Revelation is eloquent on this principle of his Divine nature.

The conclusion from these views of population will be, that as the laws and system of it have been so carefully planned and adjusted by our Creator, and are so fitly and deliberately superintended and regulated by him, its augmentations should be considered always as his will, permitting or producing, and therefore as never detrimental to the welfare of human society. We cannot too often remember that the principle of his government, in all things, is to do good and to cause good. In this spirit and on this principle he created our earth and all that it contains; on this he examined and judged of what he had made. He found them to be good, and he ordained *their perpetuation* because they were so. On

this principle he has continued them, and on this he rules and disposes of all things that he directs or controls. On this principle all his interferences take place and all his influences are imparted. Benevolence is his perpetual feeling; beneficence his unceasing purpose; benefaction the universal gift and product of his administration and operations. Both his creation and his revelations display and authenticate to us these features of his Divine character; and on these we may reason on all that he does without fear of mistake. Guided by the conviction that he conducts the course of human life as a truly wise and Omniscient Parent, ever provident and gracious, we may infer that he acts as such as much in multiplying his human race as he did in creating it.

Indeed, all multiplication is creation; but it is creation by intermediate instrumentalities, instead of being produced by an omnific fiat. All things arose to being at his word, but they so arose with provided mechanisms in those which contained living principles, through which his forming power was intended by him to operate in all their subsequent reproductions. By these mediums he now creates, and every new generation is thus as much his formation as their first made ancestors.

We may therefore believe that the continuance and increase of population in every country is a blessing and a benefit, both individual and social. Existence is his greatest benefaction to us, because it is that to which all others are and must be attached; and it is a benefit not meant to be confined in any merely to themselves. In our own race we are all designed to be benefits to each other. We have been largely so in every age and nation; and it will be our personal fault if we be not always mutually serviceable. The poorest benefit the richest, and they their inferiors. Mankind cannot exist in any peaceable nation without this ever reciprocating advantage to each other. The benign effect would be increased if it were more intentionally prosecuted.

Let us next consider some of the advantages which may be discerned to accrue from enlarging population.

LETTER XVII.

creasing Population may require some new Civil Regulations.—Statement of the Natural Advantages from it.—It cannot arise if there be not Food for it.

My dear Sydney,

That an enlarged and enlarging population is a national ood, which every statesman should promote, and which pa-iotism in all countries should desire, had become, from the perience of the benefit, a sort of maxim in politics before e Malthusian theory infused an unnatural dread of it, from e alleged effects of the supposed alliance between multipli-tion and starvation. The suspicion of such a link, which e public assertion of this doctrine excited, has occasioned me to regard those poorer multitudes, of whom all nations stly and necessarily consist, as endangering and oppressive cumbrances, which causes and perpetuate the largest por-n of the misery and crime with which society is afflicted. ese ideas have put philanthropy into a state of civil warfare thin itself, and have arrayed some of her best friends into undesirable hostility against each other.

The examination of the contested points has made me ch regret the differences of those who are all really zealous the public good, and I believe as much so on the one side on the other. I have at least been acquainted with very nourable and valuable men who have espoused opposite ws on this important theme; but the meditations upon it ve ended in my conviction that population never will en-nger any civilized society. On the contrary, that, as it ltiplies, it will be the strength, and support, and benefactor the community, wherever it prevails. It will indeed oc-sion some new laws and measures to be necessary to adapt civil state, and some of its provisions and institutions, to new circumstances which arise from it and will accom-ny it; but this is no more than what the increase of our mmerce and manufactures, and of every other element of litical *wealth and greatness*, also requires. New events,

new positions, and new relations always exact new measures of administration and much additional legislation. Enlarging population will place us under a similar necessity, but will also bring with it the augmenting knowledge and intelligence which will not be slow in discerning the adjusting regulations, that will make the national increase a national aggrandizement, and a general comfort and blessing. Our statute-books show that in every reign we have had new regulations established by our legislature on many subjects of national interest, in order to meet and arrange the new emergencies which arose, beneficially for the parties interested and for the community at large. The same application of fresh devisings and adjustments must be, from time to time, repeated in every age; for mankind are always moving to new positions and circumstances, and into new personal states and characters. We are not what our ancestors were: we are new men, with new minds, and with novelties increasing instead of lessening all around us; therefore, although the late Mr. Wyndham complained of the applications to parliament as treating it like the parish pump which every one was working; and though it is a querulous objection to our laws and law-books that they are trains of volumes instead of brazen tablets or pamphlets; yet, until society becomes paralyzed and stationary—until both our moral and intellectual activities decline into ignorance and torpor, we must, in every generation, perceive and put in action the additional means and measures which the safety, as well as comfort of society, in its new state and difficulties, will require. The more wisely this is done, the more the public welfare, and the individual ease and satisfaction, will be reconciled and promoted; but it must at no time be omitted, unless we sink into Mussulman apathy or Spanish debility. Nor will there now be any want of either men or minds capable and willing to effectuate what will be thus needed. Benevolence never influenced more generally a nation than it is now actuating the British dominions, and also, in wish and spirit, if not in efficacy, every other European state. We may have most power, freedom, and opportunity of practically obeying and realizing its suggestions, but others are desiring what they cannot yet execute. This feeling is manifestly now becoming, more than ever, a public principle of conduct; and even statesmen are, in most cabinets, exchanging very much their old Machiavelian craftiness for the nobler

principles and guiding light of intellectual philanthropy. It is daily becoming more barbaric and inferior to do otherwise. It is as great a disgrace to be found selfish and tricking in public life, as to be knavish and fraudulent in our private dealings. It is a brand and a stigma not to legislate and counsel uprightly. Some may choose to act otherwise still, from old habits and imperfect education, and also because human conduct will long have its obliquities and inconsistencies. There is also a good deal of that minor unsoundness of mind which, although not amounting to positive derangement, yet produces much erroneous thought and action; but the general stream will be purer and healthier, and is already much clearer than it has been. Knowledge and education, irresistible improvements, the contagion which spreads imperceptibly from them, and the example of every improving individual, are daily meliorating the minds of all classes in society. If we feel this benefit in ourselves, it is a witness and a sample how others are affected. The consequence, therefore, will henceforward be, that whatever new provisions, and inventions, and regulations the national good requires, as further generations and fresh circumstances arise, there will always be the desire and the abilities to supply them. Difficulties will occur only to rouse the determination and to suggest the means of surmounting them. It is thus that intelligence always acts, and thus averts or extinguishes the evils that would embarrass.

For these reasons, with a fair exertion of the talent now existing in our rulers and lawgivers, and of their habitual good meaning and social well-wishing, we need not regard our increasing population with the least anxiety or mistrust. Political wisdom will do what is necessary to harmonize its numbers with the general good; and the Divine blessing, poured with approbation on such aims and conduct, will give effect and success to what national philanthropy will thus devise and establish.

Let us, then, not dread enlarging numbers, nor pursue measures of severity against those who most need our attention and kindness, in order to repress them; but let us seek, instead, the most judicious means of adapting the increase, which it is the Divine plan and purpose at present to occasion, to the social benefit of all, with the least possible pain and injury to any class of our community.

Let us now inquire into the benefits which an increasing

population occasions; and then consider if any disadvantages arise from it to overbalance them. But we will not do this on the mistaken principle of seeking only the greatest happiness of the greatest number; because this seems to me to be an evil principle in its pratical applications, as it involves the perpetual sacrifice of the minority to the majority. Forty-nine may be made miserable that fifty-one may be happier! the greater number may enjoy and tyrannize! the rest must, at their pleasure and for their convenience, submit and suffer! Instead of this, we will be guided by the Christian tenets of doing good to all, and of doing to every one what we desire should be done to ourselves.

All national greatness is founded upon population and arises from it. There can no more be national greatness without population—a population adequate to the magnitude—than there can be human nature without human beings. It is the people which constitute every state, not the soil they tread on. They form the country, which takes its station in the charts of history; and nations arise to be such only as their populations enlarge. It is this increase which converts a family into a tribe, and a tribe into a people, and a people into a powerful, civilized, and distinguished nation. Stop the multiplication anywhere, and it dwindles into inferiority and feebleness in every age and climate. The first marking symptom of a thriving country is the increase of its population.

It was not Africa which made Carthage what it was, but the Tyrian emigrants, who, by their settlement and multiplication, formed and established, as they increased, the Carthaginian empire on the African shore. When the Roman hostilities broke up the Punic population, the Carthaginian state and nation disappeared, though their territory remains where it was, and the walls and edifices were long subsisting upon it, and new comers afterward stationed themselves within them. It was by the continual enlargement of its various populations that Greece arose, with its multiplications, to splendour and fame within itself, and enriched and dignified its immortal nation by numerous settlements and colonizations elsewhere.*

* It is an interesting fact, that, in our own days, an evidence should occur of the Athenian colonization of the Adriatic. Greek vases have been found in Adria, and led to a discussion how they came there, and

From this cause all the great empires of antiquity, and the prosperous kingdoms of modern days, have ascended to their wealth and celebrity. The multiplications of their populations have always been the basis of their progressive eminence, and always will be the indispensable materials of their stability, their affluence, their interior strength, and their external power. The Roman empire fell for ever when its population was shattered and consumed. Its hills, and Tiber, and city remain, but the ancient greatness and the ancient Romans have vanished together, to reappear no more. A nation once exterminated can never be remade.

The elements of all political advantages and grandeur to a country lie in its population, and nowhere else. The richest soil, the gold and diamond mines, the finest quarries and noblest rivers of any region, are nothing to society without the hands and arms that extract and apply their utilities from the passive ground which contains and conceals them. It is multitude which makes a people, and their local station becomes important and dignified in proportion to their increase, and to those activities which their augmentation excites and makes necessary. Wealth, industry, produce, arts, comfort, convenience, influence, talent, and power augment as they multiply and decline as they diminish. There is not a single state or nation which has arisen to notice or fallen from it but illustrates these conclusions. It is, therefore, to act in contradiction to recorded history and to living experience to assert that enlarging populations are not a national benefit, and have not been the solid means by which national aggrandizement and dominion have been most effectually established and upheld.

From this general reasoning let us pass into more particular observations.

Population cannot increase, unless there be subsistence to maintain it, and never arises where there is no provision for it. The food was made at the creation, before the living beings were formed who were to use it; and in every period

what connexion could have been between that region and Adria. No information in ancient authors elucidated the question: but in this last summer, 1836, Mr. L. Ross, who is making excavations at Athens, in prosecution of his archæological researches, dug up an inscription, which states that a colony from Athens, under a leader named Miltrades, settled in Adria 325 years before the Christian era. He has lately published an account in the "Kunstblatt of Stutgard" of this discovery.

since the same order in the course of nature has ensued. Provision everywhere precedes the gift of life. No animals of any kind arise where there is no food; but all which come into being find their maintenance at hand. This plan is so remarkably and invariably pursued in all the systems of nature, that every animal mother which does not herself feed her young, is always led to lay her eggs where the emerging offspring will find what they require. I believe I have mentioned some instances of this sort in the first volume of these letters.

In the human race, the parents would not be alive to have their children unless they had sufficient sustenance to keep themselves in being. Therefore, the existence of those who live, and the fact of females being mothers, are at all times evidence that there is on the earth, or regularly arising from it, enough to maintain every coexisting race. There could not be either parents or offspring unless this were the case. Population thus follows subsistence, and never comes where this is not. Hence the very appearance of population is a testimony that the food which supports them is at that time in existence also.

That food is then in existence is likewise a pledge to us from nature that it will continue to be producible. More food has hitherto always come from the earth as man has applied for it, although he has been increasing from six persons to a thousand millions of human beings. The experience of her past bounty is the only pledge we have from nature for her future supplies: for we must remember that she never gives more than an annual sufficiency. She must renew her gift every year, or we all perish. The whole of mankind are, therefore, as much living with the possibility of being starved as any increasing population can be, and perhaps as much as any individual is. We cannot command the sunshine, nor govern the rain, nor avert the frost or hail. We are therefore at the mercy, every year, of him who has this power; and if his constant kindness in this respect releases us from any actual dread of the failure that would ruin us, it is fractious self-tormenting to harass ourselves with fear that the additional need of a fiftieth or a hundreth part more will not still be as producible as it hitherto has been. The existence of every population, whatever be its numbers, is therefore a demonstration that it has sufficient food; and the uniform increase

of it, with every enlargement of mankind for the last 4000 years, is the surest pledge we can have that the augmentation of the one will be attended with the same augmentation of the other, which has hitherto never failed to arise. We have as much reason to doubt the coming of the supply at all for any, as to be apprehensive that it will not come with the augmentation we may require. He who grants it has thus far always granted it to our fair industry, in the quantity which has been from time to time wanted, although our claims for the donation have been from age to age enlarging. To suppose that he will not continue to do in this respect what he has, up to this moment, invariably done, is to believe without the smallest evidence, and in opposition to all experience, that he will now suddenly change his system, both of nature and Providence, and doom us to destruction for continuing to fulfil his will in perpetuating the series of his human race. Our conclusion therefore is, that the very rise of population is in itself an evidence of present sufficiency, and that is a token and an assurance of the continuation of the supply.

LETTER XVIII.

Further considerations on the Benefits which arise from an increasing Population.

My dear Sydney,

The visible results of an increasing population display to us the benefits we derive from it. We will notice the most prominent of these, as they regard the nation, the age, and the individual, and as they affect human nature itself.

The appointed and sustained division of mankind into many nations makes their comparative populations important objects of their concern with respect to each other. The most numerous are always the most powerful, if other things are equal; and this superiority balances many disadvantages, and puts the less populous in the greater danger of aggression or conquest. Unless, then, other nations are willing or able to curtail their populations, we must grow as they grow, or we shall

be in our ordinary power while they have magnified into a giant's strength. If, then, we desire national safety, independence, and foreign respect, we should rejoice that the living materials from which we derive them increase in full proportion to the popular multiplications of the surrounding communities. The smaller our numbers, the less must be the amount of our naval and military protectors. These must be always in a proper ratio to the amount of the whole people, for a due portion only can be spared or maintained by the rest. To be in the first rank of existing powers, our numbers must keep in that quantity which raises others into that stage; if not, the diminution will lower us into those inferior rates to which national disadvantages are continually accruing. Hence in this day of large kingdoms and populous nations there is no alternative between enlarging numbers and inferiority, danger and decline. But experience everywhere shows that there is far more general comfort and competence to every class of society in a prosperous and powerful nation than in those which are feeble and subordinate. One of the statesman's greatest objects, in taking the census of his countrymen, is to show to other states the advanced strength, the ability to maintain its independence, and the flourishing condition of his own. The increase of its population is the most compendious evidence to other governments of the internal vigour and social healthfulness from which it has arisen, and its sufficiency to be its own protector. An increasing census is an enlarging shield of defence from all exterior aggression; it is an ægis which deters as well as guards.

Every newborn individual, even the poorest, must, if he lives, have food, clothes, and habitation, furniture and implements, and conveniences of many kinds which he cannot, in a civilized society, make for himself, but which must be worked and provided by others, and be sought for from them. Every new comer, by this demand and its supply, cannot but augment the productions, and, in them, the property of the society to which he is added, and furnishes further employment for those who must earn their enjoyments by their labour, and who are ever willing to do so wherever that is required. Agriculture must raise more corn; the manufacturers fabricate more goods; the builders erect fresh houses or cottages; artisans of all sorts must make more of their commodities; *and there* must be everywhere more shopkeepers to sell them.

Thus increasing population increases the activities of every part of society; and no one can deny that, if the added numbers find enough to eat, they do good to all by their other necessities. The more they want the more they benefit; for all the arts, trades, professions, and manufactures seek for business and demands. The more orders arrive the happier and more thriving they are. It is for their fellow-creatures that they work, and by the use which others make of their productions that they live. They send their goods abroad only because they weave and work more than is wanted at home; but if the domestic demand enlarges, as from additional numbers it always must, their profits are greater, and the remuneration more immediate, and their trouble of the exportation avoided. Thus augmented population stimulates the industry, increases the ingenuity, and augments the property of the country, and causes the working families to be more employed, more comfortable, and more contented. Every man wants as much as he could make himself. The newborn being, therefore, never brings into society hands to be idle or indolence to be maintained. The necessaries he requires others must supply; but he must also exert an adequate degree of his own labour for their benefit in order to procure them. Hence no additional population is a burden on any one. The existing work for the new arriving, and these for them. It cannot be otherwise. We do not pass the newborn into an island to stroll and slumber while the rest maintain them. They shoot up among us, and mingle with us in all our business and activities; and the young, as they mature, contribute as much to support and benefit their elders as they have been benefited by them. But if the population languish, arts, industry, production, and comfort lessen and languish too. There cannot be more of these than there are individuals to exercise them and to give them employment.

Thus far I see no reason to question the advantages of an enlarging population, viewing them in the lowest and most material form, and in their national effects; but other considerations open before us, and present to us benefits which enlarging numbers occasion to their age, to themselves, and to human nature itself.

The talent, the energies, the inventive skill; new discoveries of the utilities of natural substances; new thoughts and modes of applying *these properties* to the productions of new

commodities, or to the multiplication of former one
creative activities of the human mind, and the nov
abundant, more diversified, and more universally diffus
veniences of life have in every country increased wit
increasing populations, and most signally in our own.
more people appear in our country, the more we inve
ricate, possess, and enjoy. Our comforts have aug
with our numbers, and ever will and must do so, b
they are the makers of all; the more comers the more
and the more consumers too; every newborn person
to be a new customer, for every birth multiplies the han
are to make, the minds that are to devise, and the
that want supply; but all who want must provide them
with what they need, and must therefore make it, or d
will induce other makers to give them what they require
one can live without the necessaries of life, and no o
stows them gratis on another in the general course of
We exact of each other that every one shall exert hi
powers to provide his own maintenance; and this can b
effected by doing something that will be serviceable to
and that will induce them to exchange for it what will b
ful to themselves. Hence the more people that ari
more of the necessaries and conveniences of life m
made; for if, as in wilder countries, others will not p
them for us, every one of us must make more for ours

Thus the necessaries and conveniences of life in any
try, that is, its property and wealth (for these constitu
substantial wealth), must increase with its population.
greater number need more than the less, and cannot e
they have not the due supply. Production, therefore,
and does invariably multiply with population. Its qu
depends upon their augmentation, and arises from it, an
not fail to do so unless mankind cease to want and
They must have the amount enlarged as they enlarge.
ger, cold, and rain, desires, active limbs, love of actio
sight of pleasurable things about them which others ha
quired, the wish for enjoyment, and to obtain that the
enjoy, stimulate every new generation which grows
they actuated their predecessors. And thus it is impo
for a population to increase without productive activity
produce of all sorts multiplying in a country. We may
deem it impossible to be otherwise; for it is naturally i

sible for the newborn to go and place themselves on the banks of our high roads, or in the suburbs of our cities, and contentedly die away in famine, because they will do nothing for themselves to obtain what they need, but resolve to perish in sloth and idleness, unless robins or ravens will bring them food without their own exertions and inquiry. This, I say, is an impossibility, for the natural appetites will not let them act thus; these stimulate, and every new individual of the enlarging numbers seeks as heartily to provide himself with his necessaries and comforts as any of those who were existing before he was born.

But where the population is small, the productions and property of the country are in a diminished state. If population stops, they never increase. Poverty or scanty circumstances, and fewer conveniences, are the companions of small societies, as wealth and abundance are of all multiplying communities—always wealth to them, as compared with their preceding state, and wealth enlarging, as to its comparison with others, as they multiply and learn how to gain or make what they desire. I admit that happiness is independent of riches and abundance, and may be always enjoyed without them. But if nations deem an affluence of all that human ingenuity can make or use a distinction and an advantage, they will possess these more largely as their inhabitants multiply and industriously employ themselves.

New population ensures likewise new kinds of produce of all such, as well as greater exuberance; for as it comes up into a society where all former branches of industry are well filled, the younger must either wait till the older die off in order to take their place, or must think and contrive for themselves some additions to the utilities or pleasures of their fellow-men, in order to have the employment and the profit they desire. New men have new ideas, and strike out new paths, and seek to be distinguished by their novelties; and because they are new men, in new circumstances, and with new habits, they think new thoughts, they discern new things, they form new imaginations, and devise new productions of some sort or other, and can no more help doing so than they can avoid sleeping, dreaming, awaking, or exercising any of the functions of their frame.

Hence, as populations enlarge, the inventive powers of human nature are stimulated to new conceptions, and new ac-

tivities, and to new creations of the necessaries, conveni
and pleasures of society. They cannot but endeavour
crease the means and materials of gratifying, benefiting
interesting their fellow-men, in order to be gratified
selves. There is nothing left to their choice in this res
they must thus act or starve; and no man will starve
can devise or obtain employment that will enable him t
tain what he needs. Population, therefore, cannot mu
without thus multiplying a nation's property, wealth, com
convenience, talent, strength, and enjoyments.

The MORAL and intellectual qualities of a nation must
wise increase with its population; must—I repeat th
phatic word—because it is the plan and will of Provi
that this should be the result, and therefore his establ
system of our nature and social economy compels it to b

As to the intellect, this is very obvious, for it cann
otherwise. The more minds that exist, there must be
thinkers, and more thoughts, and more original imaginat
more reasoning and more knowledge. Every man
something, and twenty must have and add more than five
a thousand more than twenty. When that thousand r
plies into a million, there will be ten hundred times more
sations, ideas, and knowledges of some sort or other,
there were or could be while only the smaller number ex
A few may slumber and vegetate only; but numbers e
each other. They will talk and debate, as well as think
eat. They will strive to outdo each other, and each to l
least, as clever as those they see and know. None will
submits to be inferior. The more there are, the more em
tion and ambition emerge and influence. The presen
human beings is always a little inspiration to each o
common chitchat shows this; and the more there are that
gregate together, the greater is the animation and the m
result. When this spirit begins, we daily see, that th
like sheep, they will often follow one another, yet, like s
they also love to wander from each other, and to find out
pasture and new ways for themselves. Hence it is a
variable law in all societies, that their intellectualities inc
and become more diversified and universal as their mem
multiply. Nothing can prevent this result.

But I grant that mental activity without morality is
midable weapon, that is more likely to be used mischiev

than for good; for power that is actuated by selfishness alone becomes more dreadful and pernicious in proportion to its increase. It is, therefore, with delight that I see reason to add, that the increase of population must also increase the morality of a country in all its branches. I do not mean that it forms perfect men, or can yet extinguish vice and crime. What originates from other causes must continue as long as these causes operate; and the causes of sin and error on earth precede the enlargements of all nations, though when they actuate it must be on the individuals who compose them. Sin and error, vice and crime, will therefore yet accompany the diffusing race of man, and be in every city and in every village which he inhabits.

But my position is, that increasing population is ever acting to lessen this evil, though it may augment the numerical amount, if the moral census be taken by heads alone. A nation of sixteen millions must have more vicious individuals than when it was a people of one million only; but it will not have sixteen times the quantity of vice and error which existed within its territory in its earlier state.

It cannot have the ignorance; that is clear. It will not, therefore, have those errors, follies, vices, and crimes, whatever they may be, which that degree and kind of ignorance admitted or produced. It cannot have the habits or pursuits which were popular or peculiar to its former state, nor the moral evils which they occasioned. From all these it must have emerged simply because the enlarged population is in a new state and new circumstances, and consists of new individuals.

Can we doubt this? Are we now practising all the vices, absurdities, and crimes of our Anglo-Saxon ancestors, or of our Danish and Norman colonizations? Are we pirates? Have we sea-kings? Are we no better than those whom our great Alfred taught and governed, and by whose ignorance, violence, immoralities, and atrocities he was so much harassed and grieved? No one can suppose so. The same argument will proportionably apply to every succeeding reign; and I think no one who has made the private manners, the domestic literature, and the biography of his country a minute study, but must feel and say that, take class by class, and compare each of these now around us with its fellow when George III. or even when George IV. began to reign, both the

public and the individual morality of our improving, a
as multiplying countrymen, have increased, are incr
and will not be diminished.

I am old enough to be able to remember what
known and seen, and what my parents related to me,
compare what I remember and heard of with what I n
serve and know; and my personal conviction of the
rating fact which I am expressing is a daily source of
cation to me and of self-congratulation; let me add,
real gratitude likewise to Him from whom all impro
flows—that I am living at this time, in such a count
with such a prospect around me.

But it would be most unjust to my contemporaries
not to admit, and state also, the coinciding truth, t
meliorations which do so much honour to human nat
not confined to our insular community. The spirit of i
ing good is moving upon every one; the breath of He
gently breezing upon all. In each, a new impulse t
is right and best is exciting the human heart, and pu
the mind, and creating a diffusing dissatisfaction wit
appears of a different character. The world is visibly
izing everywhere as its numbers increase. There
much to be done to be effected rapidly or ostensibly;
that is well accomplished will be unseen, because it is p
and can only take place by its individual efficacy. I
tions and consequences will, by degrees, be perpetually
ing out evidence of the new process that is working, a
moral progression in which human society is now s
advancing.

A few more particular considerations may be subjoi
the inevitable connexion between the increasing pop
and the increasing morality of a nation, taking this alw
its fair and large sense, in the actual general truth, a
judging by the partial exceptions or interrupting anc
only.

If the moral virtues were not the most useful to
and the most beneficial to the individual, they would
long since become obsolete among mankind. No sa
son would willingly put others into handcuffs and fet
they were unnecessary, or spontaneously encumber h
with them if he could live without them. None would,
fore, restrain or regulate their inclinations and actions

moral rules or self-coercion, nor require others to observe them if they were useless to himself and of no importance to the general community. But if morals are unserviceable, so are laws—for all laws are moral restrictions on human conduct—and can only be obeyed by the self-government of individuals, in conformity with their injunctions. Laws are the political and civil morality which the social authorities enjoin in actions wherein the public are interested. The morality of private life consists of those private laws which reason and revelation respectively require every individual to obey and practise for his own advantage and happiness, as well as for their social necessity and benefit. The continued inculcation, in every country and in every age, of both public and private morals, is an unceasing evidence to us that human welfare cannot be preserved without them, nor individual comfort either.

On this indestructible principle the moral improvement of society has been based; and by this its moral conduct, so far as it has been taught and practised, has been everywhere upheld. Fancy, argue, speculate, wish, will, and act as we may please, still the truth, which no one can avert or escape, will press always and heavily upon us, that he who will be immoral must and does personally suffer in mind, body, character, property, health, safety, or comfort; and in consequences more or less immediate from his immoralities, and in proportion as he will commit them. Our Creator has so framed our body, and mind, and our social relations, that we cannot shelter ourselves from such results, nor annihilate the connexion between wrong conduct and personal evil from it of some sort or other. This being the established law, observe its operation as society multiplies.

The common effect of all enlarged population is, that the numbers in all arts, trades, and professions increase, and, of course, the claimants for employment. When the labourers are few and the work indispensable, we must take such as we can get, even the worthless; because it is better to make use of the bad who will labour at all, than not to have that done which it is necessary to effect. But as the working population increases, selection becomes possible; and in every case where it can be practised, the man who is both moral and able is preferred to those who choose to be otherwise. No *one will prefer* the knave to the honest, or the

drunkard to the sober, or the profligate to the moral man. This certainty, and the unvarying choice of the better when the better is to be had, act like a premium and stimulus to create the habit and quality which, even in their worldly effects, are found to be so advantageous.

This principle operates alike in every class of society. Whoever will unite the moral qualities and habits with due skill and industry in any walk of life, will be superior beings in estimation, in real value, and in conduct, to those who choose to be immoral or irregular, and will be preferred as such wherever the best and fittest are wanted or sought for. The improvement which their individual virtues will occasion in their minds and manners will increase their ability in all their employments, and their own comfort likewise. It is such a recommendation to be in this state and to have this character, that the propensity to acquire it is always operating, and increases as knowledge and education enlarge the perception of the utilities, and as the failures, and sufferings, and disgraceful conduct of the contrary tendency are seen and noticed. But the more population enlarges, the more the difference is observed and felt. The respectability of the moral in every rank rises always so high above the vicious and the criminal as to be a distinction in every town and village. Such characters are more wanted as numbers increase; and the demand and preference for them are continually drawing others to become like them, and cause the young to form themselves by such models. This is as true of the humblest as of the greatest, and in all the intermediate states. We seek for honest and moral servants, and never willingly employ those who are otherwise. In all our dealings, we desire to meet with such characters and prefer them. All magistrates desire such assistants, and the public require such magistrates. In every public office and private circle, integrity and virtue distinguish the individuals who have them with the silent esteem and approbation of those who know them; and, therefore, as soon as the mind becomes generally cultivated, and the knowledge of right and wrong is circulated, the moral virtues increase in their power and influence. Success will rarely be attained, or not be permanent without them; and whoever wishes to be most safe, most forward, most honoured, *and most* happy, is urged by his personal interests to be *earnest to acquire* and solicitous to preserve them.

On this ground, that the most moral men will always be the most useful, the most improved, the most valued, and the most prosperous men in every society, increase of population must augment the number of the moralized individuals, and the general habits and practice of morality in the country. The necessity for them will be augmented with the fresh numbers that arise. They will be more appreciated as they are more wanted. They will be more selected and preferred for their utilities; and as they multiply in number, all that are not so will fail and suffer in every class from their depreciation and inferiority, on account of their deficiency. While we can help ourselves to what is better, we shall never take what is worse.

But do no evils attend an increase of population? None, I think, from the increase alone. No new ones accrue which did not exist before. The young generations come unoffendingly among us as to themselves, and have been planned to come in the most helpless and docile form, that we may mould them to our wishes, and make them what they ought to be. If, then, they afterward become producers of evil, they are trained to be so by our habits, and only imitate at first what they find, and continue it because they have learned from us to practise it.

It is true, they want subsistence, and must acquire it; but so do all among whom they come; and until nature fails to produce what their industry solicits from it, there will be enough for them to share, as well as for their predecessors to enjoy.

They have likewise to be settled in some channels by which they may gain what they require; but they bring new wants and new labour with them, and these enlarge the ancient channels or form new ones. The same difficulties exist every hour in society, whether more come or not; all stages of it have their poor, and necessitous, and unprovided: the stationary population as much as the enlarging, and the declining many more. If population should produce no more than merely to replace itself, yet it must have its infant, who must be fed by others, and old age, which cannot maintain itself by its labour. The same proportion of these exist at all times, and, as far as public mendicancy indicates destitution, more of this, in its most miserable shapes, appears in countries that enlarge but little, than *in an increasing* population like our own. Vice,

crime, and penury coexist in all nations, and are the
causes of each other. They never disappear when popu
stops, and do not increase in ratio, though they may in
number, because it multiplies and prospers.

LETTER XIX.

*Views of the State of the Living World in several Countries
Comparative Proportion of their Inhabitants at the succeedin
of Life.—The possible Longevity of Human Nature, and Inst
it in various Parts of the World.*

MY DEAR SYDNEY,

Having thus surveyed the laws and system which
been established for the continuance and governed augm
tions of the human population, let us now consider the
state of our LIVING WORLD, which results from them,
will show us the plan and intention of the Creator in a
ing them, and in sustaining their daily operations.

We will begin our inquiry with our own country, as
which, as residents in it, we cannot be but most interes

One remarkable fact appears to us in our living
which is, that the males with us are almost equally d
between those who are under twenty years of age and
who are older. In the year 1821, nearly one half of
male inhabitants of Great Britain were found to be les
twenty years old; and the other moiety to be above that
The same fact occurred again in the census of 1831.†
was as true of England and Wales by themselves‡ as of
land, with a little more on the younger side, separately t

* "In the enumeration of 1821, the males under twenty were 3,0
upward of twenty, 3,002,300; including all the males whose age
then ascertained."—Rickm. Enum. Abst., vol. i., p. 9.

† "In the enumeration of 1831, the males known to be under
were 3,941,495; upward of twenty, 3,944,511."—Ib.

‡ Mr. Rickman has classed the ages in England and Wales in
Enum. Abst., p. 37. In this table those under twenty amo
2,506,636, those above twenty are 2,552,416. In 1831 the males i
LAND of twenty years were 3,199,984; and those under twent
3,176,643. In WALES, those of twenty were 194,706; under th
192,857.—Rickm., Ib., vol. ii., p. 1042.

§ *In 1821* the males in Scotland of twenty were 549,831; and

It was likewise nearly the case in Ireland, with some larger difference in her juvenile portion.* That all the great members of our community, though differing in their localities, and in many of their leading habits and circumstances, are yet under such assimilating influences as to have an approximation or uniformity of social condition in this respect, is an interesting certainty, which deserves our recollection: the young and the mature thus balance each other in the constitution of our living world: many civil and social consequences must follow from such a partition.

But the precise year of the age which divides the proportions of the juvenile and elder population is not the same as ours in all other countries. Like all the ratios which concern our birth and life, the term that separates the younger and maturer part of society varies in each nation; but yet again, like them, the varieties are bounded, in these diversities, by limits universally sustained.

Thus, in America, as we have before remarked, one half of its inhabitants are under sixteen years of age, and all the rest older.† In Russia, we found that half of its newborn generations died under fifteen;‡ while in Saxony, a moiety are older than either of these, being almost twenty-three years;§ and in France, twenty-six years is the dividing boundary of her longer living youth.‖ Hence more of the young survive to twenty in Great Britain than in either the United States or the Russian empire; but not so many as in Saxony, and particularly as in France; as if this last-mentioned country had

564,995.—Rickm., ib., 1043. The division here would be nearer twenty-one than twenty.

* In 1831 nearly one half of the males were twenty years of age, being 1,567,765; those younger were 1,927,115. It was the same in each of her four provinces.

	TWENTY.	UNDER TWENTY.
Leinster	465,953	461,924
Munster	542,200	551,211
Ulster	540,479	572,615
Connaught	319,133	341,365

The last three, having the greater portion of the younger, would make the exactly dividing age almost twenty-one.—Pop. Abst. Ireland, p. 342.

† See before, Lett. VIII., p. 58-61.

‡ See before, Lett. XIV., p. 127.

§ In 1834 its males were 775,244; of these, those under twenty-three were 385,362; the above were 389,884.

‖ The "Compte General" for 1826, presented by the Garde des Sceaux, states the population *of France to* have been, at that time, 30,000,000; and *thus distinguishes them*—

been, at the time of this census, more favourable to youthful duration than even our own. I have not seen a later discrimination. The portions in Canada, at the census of 1825, resembled those of England in this point.*

The subsequent ages present to us some impressive indications of the superior duration of individual life in England as compared with the United States of America, which I have not yet seen noticed. Whether the difference of salubrity arises from climate, nature of soil, habits of the people, their employments, their political excitements, or their busy moveable life, or from a mixture of all these accidents, it may be difficult to decide. It is, however, striking enough to

Under 9 years	5,968,810
Of 9 and under 16	3,954,370
16 . . 21	2,652,030
21 . . 25	2,019,220
25 . . 30	2,367,230
30 . . 35	2,201,340
35 . . 40	2,016,860
40 . . 45	1,834,780
45 . . 50	1,641,430
50 . . 55	1,451,880
55 . . 60	1,229,140
60 . . 65	991,930
65 . . 70	740,520
70 . . 80	764,050
80 and above	166,410
	30,000,000

Fer. Bull. Univ., 1827, p. 381.

According to this series, those under twenty-five were 14,594,530; so that the full moiety would be nearer twenty-six, if each number be quite accurate.

* Mr. Bouchette thus states the ages there—

Under 6	82,870	
6 to 14	74,429	
14 to 18	29,935	
MALES.		
18 to 60	60,395	married.
60 and upward	9443	ditto.
18 to 60	33,941	single.
60 and upward	1994	ditto.
FEMALES.		
18 to 45	52,864	married.
45 and upward	1860	ditto.
18 to 45	39,518	single.
45 and upward	6682	ditto.
	392,931	

Bouchette's Brit. Dom. N. Am., vol. I.

make us feel that length of life beyond the middle period is not a benefit to be at present sought for there; but rather to be surrendered by those who may go to the Hudson or to the Ohio in search of other advantages from a settlement in these provinces.

The contrast between the two countries as to duration of individual life thus appears: In America, nearly one third were under ten.* In England and Wales, the same proportion were a year older.† While about half were only sixteen in the States, with us they were twenty.‡ Nearly two thirds there were under twenty-six, but the same quantity here were between thirty and thirty-one.§ In America, one seventh only were forty; one eighth forty-five; one twelfth fifty; and but one seventieth were seventy.‖ In our own island, one seventh were fifty; one fifth were forty-five; less than one fourth were forty; and a thirty-fifth part were seventy.¶ Thus we have twice as great a proportion of aged persons at seventy as the American republic possesses; only one seventh less than double the same proportion of the number at fifty; above one half as many more at forty-five; not less at forty; five years longer at twenty-six; and four years longer at sixteen. Hence Englishmen live longer in England, at all these ages, by the differences above expressed, than the inhabitants of the United States in their domestic localities. So that emigration to the American commonwealth from our native soil may be considered to carry with it a probable abbreviation of life. Not so to the Canadas. The duration of vitality there resembles much that which takes place in Great Britain.** I am inclined to think that the advantage depends

* See before, Lett. VIII., p. 58–61.

† In 1821 the males living under ten in England and Wales were 1,485,437. The one third would have been 1,717,017. The addition of those a year older would bring the numbers to this amount.

‡ The numbers were 2,598,636. The exact half would have been 2,575,526.

§ The males returned under thirty were 3,354,416. Two thirds would have been 3,434,034.

‖ See before, p. 58–61.

¶ Those of fifty and upward were 720,645. One seventh would have been 735,864; under forty were 3,948,078; adding to these one half of those between forty and fifty, we have for those who were forty-five 1,031,872. One fifth would be 1,030,210. Those of forty and above were 1,303,974; one fourth was 1,288,103; at seventy were 146,932, which is nearly one thirty-fifth of 5,151,052.—See Rickm. Table, vol. i., p. 37.

** The males in *Bouchette's table*, reckoning them as half of those

more on the habits than on the territory—a moral rather tha
a physical effect.

On comparing the living world in some other states wi
our own and with each other, some of the results appe
highly favourable to England, especially as it regards th
longevity of existence. None equal our island in the propo
tion of very old people with one exception; that I will noti
in the latest term.

In Saxony, up to the age of sixty, there was some analog
between their duration of life and our own; but after that ag
the longevity of England exceeded the Saxon with an ascen
ing superiority as the years augmented. One fourth of th
Saxon males were above forty; one seventh above fifty; an
about one fourteenth and a half above sixty.* So far
was near the proportions of England; as here almost on
fourth were above forty; one seventh above fifty; and on
thirteenth and two thirds were above sixty.† But beyon
this we find that in Saxony one fiftieth only were above sev
enty; not a three hundredth part were above eighty, and n
a ten thousandth part above ninety.‡ Whereas of En

under eighteen, whom he has not separated into sexes, and adding
this all those he has distinguished, amount to 198,800. Of these the
of sixty and upward were nearly one seventeenth and a half; these
the United States of this age were not one twenty-fifth part in 1831.—S
before, p. 60–61.

* The male ages of Saxony in 1834, of forty and upward, were—

40 to 50	78,285
50 to 60	63,346
60 to 70	33,002
70 to 80	13,153
80 to 90	2256
Above 90	72

The whole males were 775,244.—M. Preston., Stat. Soc.

† In England and Wales in 1821 the living males of forty and s
stood thus—

40 to 49	482,329
50 to 59	342,904
60 to 69	231,509
70 to 79	115,032
80 to 89	29,557
90 to 99	2253
100 and upward	60

Out of 5,152,053, the male population.—1 Rickm., xxxvii.

‡ Saxon males, seventy and upward, 15,481, or about fifty-
thirteenth; those of eighty were 2298, which is the 1-133d
775,244. Those of ninety and above only 72 out of this numbe
10,767 and one third.

lish males, a thirty-fifth portion reached seventy; a hundred and sixtieth part were eighty, and 1 in 2253 were ninety and upward.* Thus there was twice as great a proportion in England at seventy as in Saxony; nearly the same at eighty, and above four times as many at the age of ninety.

On comparing France with England in this respect, we find, that in the most precise enumeration of her males in 1830 who were between twenty and sixty, England and Wales exceeded France by the difference between a one fifth and a one eighth, or as eight to five; for our continental neighbour had little more than one eighth of her males between these ages,† while England had the larger proportion of above one fifth.‡

On contrasting the French population of 1826 with the English of 1821, we observe that the former had most males at forty and fifty, and likewise, though in a less proportion, at sixty, and also at seventy.§ But England had a much greater ratio of those who reached eighty, and, apparently, would have

* In England and Wales, in May, 1821, those of eighty and above were 31,900, or 1 in 161; those of ninety, 2313, or 1 in 2253 and one third. Those of one hundred were 60. These were but 1 in 85,867.

† The population of France in 1830 was ascertained to be 31,845,428. The number of males between twenty and sixty form the National Guards of France; and these are stated and distinguished in the following manner:

IN THE COUNTRY:		
Between 20 and 25	337,863	
26 and 30	490,962	
31 and 50	2,215,593	
		3,044,418
IN TOWNS:		
Between 20 and 25	107,031	
26 and 30	155,529	
31 and 59	701,871	
		964,431
		4,008,849

One eighth would have been 3,980,678.

Bull. Univ., 1830, Oct., p. 14.

‡ The males of England and Wales in 1821 between twenty and sixty were 2,173,965 out of a population of 10,530,631 in that year; one fifth of these would have been 2,106,126.

§ The proportions were—

	FRANCE.	ENGLAND.
40 and above	3-10	not quite 1-4
50	1-6	1-7
60	1-12	1-13
70	1-30	1-35

exhibited a still larger one at ninety, if the French census ha discriminated these.*

But if England possesses more octogenarians than Franc this old continental country very far exceeds America in th quantity of her elder population.† At the age of ninety, o proportion still more strikingly surpassed that of the Unite States ;‡ although it is a singular termination, that, aft transcending them so largely in the series of the elder popul tion up to after ninety, America had the advantage in the fe who attained the ultimate longevity. Only 60 males out o above 5,000,000 were living at the age of one hundred i England in 1821 ; while the United States in 1830 possesse 274 of that age out of a number not much larger.§

Of all the countries that I have had the means of examin ing, the empire of China seems to be the most unfavourable t old age ; for although her last census made her numbe 362,447,183,‖ yet the amount of those who attained the ag of eighty in such an immense population was less than 170,00 that is, not a two thousandth part ; nor did a thirty-sixth tho sandth part reach ninety years there, and only 1 in 17,000,0 lived to be a century old.¶ The proportion of those who we

* France, at eighty, had 166,410 out of 30 millions, or about 1 in 18 England and Wales had 31,900 out of 10 millions and a half, or 1 i about 161.

† Thus, in America, one third were under ten years of age ; one ha under sixteen, two thirds under twenty-six ; while in France, one thi were under sixteen, one half twenty-six, and two thirds thirty-seven.

In America, one seventh only above forty, one twelfth above fift which in France were three tenths and one sixth. In the United State one twenty-fifth of sixty and above, and one seventieth above seven In France, one twelfth were sixty, and one thirtieth were seventy.

The American eighty were 1 in 294 : in France, 1 in 180.

‡ The American ninety, in 1830, were 2267, or 1 in 2363, while ou were 1 in 225.

§ These men of one hundred in America were more than in Englan by the difference between 1 in 19.556 with them, and 1 in 85,867 on o soil, or between four and five times as many ; 274 out of 5,358,569.

‖ Sacred Hist. World, vol. ii., Let. XXI., p. 304.

¶ In 1827. the Emperor Kang He, in the twenty-seventh year of hi reign, published an edict on the succour to be given to such of the in ferior classes as were above seventy. For those of seventy it directe an exemption from service, and some provision for food, on the groun that they had a right, from their age, to be nourished by the state.

To each of those of eighty be ordered a piece of silk. a kin, or a poun of cotton, a shi, or ten bushels of rice, and ten kin or pounds of meat.

Those of ninety were to have twice this quantity. This occasioned table to be made of their numbers. Those of eighty and above stand a *follows* :—

venty differed in her several provinces, but their average tio in nine of these was 1 in 818.* England, therefore, far uscends this extraordinary country in the longevity of her abitants,† and, indeed, most others. But in the proportion

PROVINCE.	EIGHTY.	NINETY.	ONE HUNDRED.
Echi-le	11,111	535	0
Liao Toung	88	5	0
Chan-Si	9043	250	0
Chan Toung	26,067	1330	9
Ho Nan	3651	451	5
Keang Nan	34,038	1065	3
Eche Keang	21,866	982	0
Chen-Si	11,582	317	0
Hou Kouang	25,544	2850	4
Keang-Si	7190	580	0
Kouang Toung	9415	591	0
Kouang Si	489	114	0
Fou Kian	5232	369	0
Sse Tchhouhan	99	13	0
Fouci Tcheou	749	94	0
Yun Nan	3618	450	0
	168,850	9996	21

Asiatic Journal, 1826, p. 381.

,086 were returned as seventy; but, as five provinces did not send up ir numbers, the whole amount of the septuagenarians cannot be pre-ly stated.

The returns thus specified the numbers of those who had attained enty in the following nine provinces.

	SEVENTY AND UPWARD.	WHOLE POPULATION.
Liao Toung	244	942,003
Chan-Si	41,991	14,004,210
Chan Toung	65,225	28,958,764
Ho Nan	8132	23,037,171
Chen-Si	13,382	10,207,256
Hou Kouang	37,354	26,256,784
Kouang Toung (Canton)	17,369	19,174,030
Fou Kian	10,213	14,777,410
Sse Tchhouhan	176	21,435,678
	194,086	158,793,306

The first of these sums is nearly the 818th part of the other.

† I feel strongly the wisdom of the Chinese government in giving this ublic liberality to the extreme sections of old age. Whoever attains hat gives a strong general evidence that there has been something so ght in mind, temper, habits, or moral qualities during his preceding e, which has assisted his constitutional nature to last to that longevity; d all, whatever be their habits, need so much assistance at that period life, that I wish a legislative provision ordered every parish to give an orary allowance to all octogenarians. It would be benevolent in it-f and useful to society.

of the greatest extent of vital durability on earth whose mortality is so much more active in the first y individual life, seems to surpass any other nation th read of. In 1824, in the bishopric of Woronesh 38,060 deaths, 56 reached one hundred years, and one hundred and twenty-five;* and in the census there were stated to be 947 above one hundred, and 202 were one hundred and ten, and one was one hu thirty-five.†

Yet if the account of the Austrian mortalities be t taken, the number of her population who fulfil thei must rival that of Russia; for, with less than half th tion, she had in 1834 more than half as many as the empire at that period of life.‡

This extreme longevity is confined to no country It was found, in 1834, in Asia Minor among the da Judea.§ It appears in the Indian region of Cabul gipsy life, with all its wanderings, exposures, and does not prevent the attainment of it;¶ nor have greater vicissitudes and fatigues of military life prec possibility of it.** So Holland, though not the

* Hertha, 1825. Dr. Pinkerton mentions that he saw a Kossack village on the Don who was in her one hundred and t year.—Pink. Russia.

† The greater ages were thus stated. Among the 947,

202	above	110	21 above
98	"	115	and 1 "
52	"	120	Lit. Gaz., 8th J

‡ "In the Austrian dominions there died last year 450 pe one hundred years of age."—Morn. Herald and Standard, 4th

§ "During my sojourn at Jaffa, a Sardinian vessel arrived board twenty Jewesses from Smyrna, one of whom bore weight of one hundred and twenty years. Several counted t existence. They were going to purchase, at a high price, a Valley of Jehosaphat."—Corresp. d'Orient., tom. 5.

‖ "Among the Nawab's friends we met a man one hundre teen years old, who had served under Nadir Shah. He had b of eighty years in Cabool, and seen the Dooranee dynasty f passed away. This venerable person walked up stairs to o Barnes's Trav. in Bokhara, vol. i., p. 162.

¶ "Died last week, in Loughton-lane, near Gainsborough hundred and second year, Merriley Buckley, well known thro of the midland counties as the MOTHER of a tribe of GIPSIES w years perambulated that district. Her funeral took place i ough churchyard on Sunday last."—Doncaster Gazette, July

** "Died at Murano, near Venice, aged one hundred an years, J. Chiossick. He was born 20th Dec., 1702, and die

country in Europe, can present an occasional instance of a length of life, rarely paralleled in our days, among the weather-beaten citizens of her navy.*

Ireland, with all the eccentricities and imprudences of at least some of her children, can maintain a competition with any other nation in this vivacious blessing ;† and even a succession of such ultra long-livers.‡

But in another instance, the age stated is so uncommonly great, that, without a careful examination and strong evidence, direct or collateral, it cannot be taken as an authenticated fact. I therefore merely mention it as it appears in the public newspapers, that those who have connexions in Cork, and are interested by such a circumstance, may inquire into the proof of its reality.§

1820; he entered the Austrian army in 1710, at the age of eight, as a fifer, and had served till 1797, for eighty-five years effectively, and after that among the Invalids for twenty-three years, having thus been a soldier for one hundred and ten years. He had served both on sea and land. His numerous campaigns never shook his constitution. He always preserved his gayety. Avoiding violent passion, he lived in great simplicity of manners, and with a remarkable chastity. His father had reached one hundred and five, and his paternal uncle one hundred and seven."—Bull. Univ., 1831, p. 127.

* "There is now living at Dort a sailor named Conrad Vancouver, who on the 20th of last month reached the age of one hundred and thirty-five years. This is the oldest man in existence in Europe."—Dutch periodical, quoted in Standard, 22d Sept., 1834.

† "Died at Coolcarney, on Wednesday last, near Ballina, Walter Reape, aged one hundred and fifteen years. He was born in the reign of George I., in the townland of Carrowreagh, where he ended his existence. His health and memory were remarkably good."—Ballina Impartial, June, 1834. Another of one hundred and fourteen is mentioned in the Gent. Mag., Feb., 1836.

‡ "Mr. Luke Gibson, of Temple Patrick, states that he has discovered in the township of Ballynaman, within one mile of Glasslough, Cicely Cooney, better known by the name of Cicely Battle. She is one hundred and thirty years of age. Her youngest daughter is eighty. She never took a doctor's drug in all her life, nor was bled. She is perfectly free from affections in her chest. During the last century of her life she has been a stranger to pain. Her pulse does not exceed seventy.

"Her grandfather died at the age of one hundred and twenty-nine. Her father, John Cooney, was bred in the town of Donegal, and followed the army of James to Mayo, where he died, in the one hundred and twentieth year of his age."—Scotch Newspaper, quoted in Standard, 8th Jan., 1833.

§ "On 25th December last (1834), Denis M'Kinley, of Sheans, near Ballycastle, departed this life, aged ONE HUNDRED AND SEVENTY-SEVEN YEARS. He never had a day's sickness, could read the smallest print without spectacles, usually rose at three o'clock in the morning, and went to bed with the family. He died on the same day of the month

We find longevity also in South Africa, so that neither climate, nor the rude state of poverty that may accompany its locality, prevents its occurrence.* It is natural that North America should not be without her share of this vital advantage when others exhibit it; and such statements as are analogous to human experience elsewhere may, in justice to the general prevalence of social veracity, be admitted.† But as some of her citizens are more fond of the marvellous than of the accurate,‡ she must not be offended if more precise evidence is required for her extraordinary narratives. §

These unusual individuals appear also in France, whose one three years ago had reached one hundred and twenty.‖ Scotland has her examples likewise;¶ and the more we

and the same month on which he was born. He was temperate in living."—Cork Constitution, cited in Morning Herald, 21st Feb., 1833.

As this age exceeds almost all others, it is desirable to have more satisfactory evidence about it. But as improbability is no actual disproof, and the subject is curious, it is worth an inquiry to those who may have the opportunity.

* Captain Owen remarks of the Island of Abdul Koory, near Lazetra, "The natives were miserably poor. One old native came on board; he said he was one hundred years of age, and remembered some events that had occurred eighty years back."—Owen's Voyage, vol. i., p. 351.

† "On 3d Feb., 1834, in Wake County, North Carolina, aged about ninety, Mr. Jesse Wale, son of Mr. Arthur Wale, *who is living* at the advanced age of one hundred and fifteen. The son was in the revolution with his father. His death was caused by a fall."—Durham Advertiser, April, 1834. The "Gentleman's Magazine" for 1767 mentioned Barnaby Ange as then dying in Maryland at the age of one hundred and thirty-four.

‡ If Mr. Turner means *to* say that a larger proportion of American citizens than of the people in other countries are "more fond of the marvellous than of the accurate," he utters a wilful slander.—*Am. Ed.*

§ I allude to this paragraph in the "Gentleman's Magazine," which, of course, has been taken from American authority: "23d February, 1833, died at New-York Joice Heth, aged one hundred and sixty-two. She is stated to have been the nurse of General Washington."—Gent. Mag., 1836, p. 446.*a*

‖ "Lately died, aged one hundred and twenty, M. Dando, the oldest inhabitant of the department of Gers, which is remarkable for longevity, having finished his long career without having suffered from infirmity."—Gent. Mag., 1834, p. 129.

¶ "There *is residing* at Joppa, near Edinburgh, an out-pensioner of Chelsea Hospital, named John Wright. He was born 4th March, 1752, and in a month will be one hundred and seven. He saw Prince Charles

a The case of Joice Heth is now admitted, we believe, to be an imposition. But why should the American people be stigmatized as lacking in veracity because of one such falsehood? It is but a few years since an imposition almost precisely similar was played off in England; the individual was a Chelsea pensioner named Wallace, if we remember right. The age pretended for him was about one hundred and ten. For his sake the veracity of England might as justly be censured.—*Am. Ed.*

search around, facts appear, which lead us to the conclusion that no difference of soil, climate, circumstances, or habits prevents the actual occurrence, not merely of extraordinary, but of comfortable longevity in some individuals in every region. Rare they always will be, but occasionally they appear in every part of our globe; though we do not find that any nation marks it with a distinction of public honour but the Chinese, who, though inferior to civilized Europe in most things, yet, at times, display a moral wisdom which deserves our emulation.* One of the greatest tests of this in a country, and of sound moral feeling in an individual, is a personal respect to old age. It operates downward, through all our social links, to our very cradle period, with a beneficial influence that every family will be the better for.

The salubrity of England, either from its climate, its manners, or its intellectual cultivation, to the more advanced periods of social life, is indicated by the fact, that in 1834 it was calculated that there were then seventy peers in the House of Lords who were between seventy and eighty years of age, or a sixth part of the 426 of whom the house, including the bishops, consists. Eleven of these were noticed as either octogenarians, or still older.†

But in ascribing the longevity of England, and therefore of any people, to manners or conduct, I feel myself to be arrested in my opinion by a circumstance that I have just remarked in Plutarch, in his treatise on the opinions of the philosophers of his own and the anterior times; for I learn there that even our ancient Britons, in all their painted nudity and wildness, when fierce manners, and barbaric habits, and all the

at Holyrood in 1745, and was beside General Wolfe when he fell on the plains of Quebec. He served in the army thirty-nine years and a half, and was discharged at eighty-one, in January, 1810. He is fresh and vigorous, and retains all his faculties entire. At quarter-day he walks from Joppa to the Excise Office at Edinburgh, a distance of four miles, and returns the same day."—Edin. Weekly Journal, Feb., 1835.

* Mr. Gutzlaff mentions: "In one of the houses we saw stuck up a yellow paper, given by the emperer in token of his great respect towards an aged pair, who had lived one hundred years."—Gutz. Voyage, p. 280.

† These eleven peers were thus represented:—

Lord Wodehouse	93	Lord St. Helens	81
Lord Lynedoch	84	Earl Fortescue	81
Lord Stowell	89	Earl Ranfurly	80
Lord Eldon	83	Earl Powis	80
Lord Scarsdale	83	Lord Middleton	80
Lord Carrington	82		

evils of uncivilization, or what was nearly such, were the characteristics of their population, yet had the reputation of living to 120 years. He quotes the Greek physician who had remarked this circumstance, and contrasts them with the Ethiopians, who became old at thirty. The Grecian refers the British longevity to their colder climate, and it is certainly not possible to attribute it to any civilized improvements. From the manner in which it is mentioned, it seems not to have been an accidental circumstance, but sufficiently frequent to have drawn the notice of foreign observers at the commencement of our Christian era.*

LETTER XX.

The Natural Division of Population into moieties of Youth and Age in England.—The settled Preponderance and Power of the Elder.—Effect of this established Arrangement.—Their respective Operations on each other.

My dear Son,

From the facts and laws we have been recapitulating arise that state and fabric of our social world in which it is the Divine plan that mankind shall generally appear and live. The constitution of society, in our British community, will convey to you a sufficient notion of what it is in the civilized nations of the world, though each country, amid a common similarity in the great outlines, has its own specific variations.

That one half, or nearly so, of our male population are continuously under twenty years of age is an ordination by which the government of human life is permanently placed, and steadily kept in the hands and under the control of the elder moiety.† In other countries the same division has the same

* "Asclepiades reports that the Ethiopians become soon aged; that is, by the time they are thirty years old; because their bodies are heated and burnt by the sun. But in Britain, men live on to 120 years, because their country is cold, and their natural heat is kept by this in their bodies, while the Ethiopian bodies are more open, from their pores being relaxed by the sun's action. Those in the arctic climes are more dense, and on this account they attain to greater longevity."—Plat., περὶ τοῦ ἀρέσκ., or Plac. Phil., l. 5, c. 30, p. 343. Ed. Ven., 1509.

† See before, p. 164.

effect, though with some differences as to the exact year and amount. This established law, which is universal in its general operations, has been made by our Creator the groundwork of his system of human society, apparently for the express purpose that the mature part of his human creatures shall be the rulers of the rest. To secure and perpetuate this effect, it was necessary that his laws of birth and death should be so arranged and conducted that there should always be enough of the elder living from year to year to be in this commanding proportion to the younger. Such a result could only be produced by a careful adjustment of these two elements of our population, with an express view to this effect. Though individual life is always shifting and fleeting, yet this consequence is abidingly sustained.

He has further secured the stability and wisest conduct of society, and, for that purpose, the governing power and influence in it of the mature and experienced portion of it, by also causing, in our island, the males from thirty to sixty, when the human frame is in its most effective state of body and mind, to be more numerous than those from fifteen to thirty;* so that, if the younger should be induced to rise in insurrection against their elder rulers, and struggle for the dominion, they have not the physical power to accomplish their purpose. The men from thirty to sixty would always have the victory against boys and young men between fifteen and thirty, besides the aid they would receive from the effective part of those who had attained or passed their sixtieth year.†

The elder are also the most steadily laborious and acquiring portion of society, and keep and use what they gain with more prudence and economy than the younger. Hence the property of society is also chiefly with them, especially its landed estates; and from their superior mental ability, and knowledge, and practice of life, almost all the superior offices and stations of authority, rank, business, influence, and important activities of life, are likewise with that portion who have reached and exceeded their thirtieth year. The males

* In our population of 1821, of the 5,152,052 males, 1,265,366 were between fifteen and thirty; and 1,418,195 between thirty and sixty.—Rickm. Ed. Abst., vol. i., p. xxxvii.

† These were 378,441; a fourth of the number between thirty and sixty would have been 354,298. All those from thirty upward to the end of life were 1,790,636.—Ib.

from thirty to sixty are a full third part of the whole ma
ulation.

To moralize, consolidate, and improve our social
still more, the yet older classes, who, from their age, ar
experienced and usually wiser, or at least with more p
and with the most calm, sedate, and peace-loving t
and habits—those of sixty and above are in number
one fourth of the mature. These intellectually influer
modify the mature and middle-aged population, whil
assist them to govern the rest. Thus human life,
country, and analogously so everywhere else, is regul
the mind and will, at all times, of the elder and aged
bers of the community. Their preponderance and po
so decided, that no contest ever takes place about it.
ever was disputed in any country, the point has long
been settled; and, by some instances of ancient tim
find that the young, who disliked their subordination t
superiors in years, had no resource but to emigrate from
and to found new settlements for themselves in othe
ities.*

* Though it will be always proper for the young, amid their
ous efforts to elevate or benefit themselves, to keep steadily in
principle so shortly, but emphatically expressed by Shakspeare-

"I dare do all that may become a man;
Who dares do more is none;"

yet it will be always true, that they must derive their worldly
and mental improvements from their own spontaneous and well-
activities. They must resist the temptations to self-indulgent
ness. But on this point I cannot quote a more impressive auth
a more persuasive recommendation, than the sentiments of Sir
Peel, in that address to the students of Glasgow which so ad
combines the characters of the statesman, the philosopher,
Christian, and which has come to my hand as about to send thes
to the press.

"Let me assure you, with all the earnestness of the deepest
tion, founded on the opportunities of observation which public
intercourse with the world have afforded, that your success, yo
nence, your happiness, are much more independent of the accide
caprices of fortune, and infinitely more within your own control, th
appear to be to superficial observers. There lies before you a bo
field of exertion. Whatever be your pursuit, whatever be the pr
which you may choose, the avenues of fame are open to you, or
are obstructed by no barriers of which you may not command th

"I have said that the avenues to distinction are free, and th
within your power to command an entrance to them. I repeat,
earnestness of the deepest conviction, there is in my mind a presu
amounting almost to certainty, that if any one of you will deter

This plan and arrangement of our social economy secure the submission and docility of the young, and keep society from being shattered by their more turbulent passions, by their eagerness of will, and national excitability and restlessness. It compels them to be teachable and to learn; because all that will be gratifications to them are in the possession of their elders, from whom they are not strong or numerous enough to force it. On these they must be dependant for all they wish and like, and to these be subjected. They can only get what they want through the channels and by the means which these allow and have established. These necessities preserve the steady order and daily tranquillity of society. All goes on everywhere in a regular and peaceable course, because the mature and aged are thus, in all classes and conditions, the sovereigns of those who would be, without this irresistible arrangement, the perpetual agents and instruments of agitation and disquiet, from their moveabilities, impulses, passions, and inexperience. I do not pretend to say that the elder are all or always wise; but they contain the wisest and most intellectual part of the coexisting society at all times, whether the degree of their capacity or moral attainments be high or inconsiderable.

We have remarked that America has more young persons of sixteen, and fewer elder persons of fifty and upward, than Great Britain. The consequence of this difference, in these portions of their population, must be, that society in the United States will be less under the government and influence of the mature and the aged, and will be more restless and agitated by its violent, headstrong, and impassioned junior classes. There will be a minor proportion of moral wisdom, and of intellectual life and pursuits, than in our own island; because there will be a less proportion of the living heads in which these qualities reside. From the account of many recent travellers, the American social world seems to be an illustration of these inferences.

But while this distribution of life has established so firmly

be eminent in whatever profession you may choose, and will act with unvarying steadiness in pursuance of that determination, you will, if health and strength be given to you, infallibly succeed."

I read these words as the voice of the heart, and as the genuine expressions of what the illustrious speaker has felt, has acted upon, and has been so splendidly benefited by.

the civil peace, and order, and the moral strength of
and keeps its constituent elements compact and its
consistent, yet the young are never without that po
influence which benefits their elder lords and makes
happy. For such is the marvellous and mysterious c
tion of human nature, that while the juvenile body
and rather fear their seniors, the mature and aged fe
pathies of affection and regard for the younger, and e
in their filial relationship, which soften authority into
to caress and sooth rather than to sternly govern. In
also, for the subjection and obedience of the junior
has been made a law of nature, and thence a universa
society, that the elder shall maintain the younger, an
them how to acquire the goods of life for themselves
advance into its maturer periods.

Thus admirably and happily has our social econo
planned and is upheld by its Divine inventor. Th
obey and revere the elder, and these love and nou
younger. The latter have been also so devised and
as to be always giving pleasure by the natural beauty
terestingness of their countenance, limbs, form, and
They are, when properly nurtured and not wrongly
to, perpetual pictures of living happiness, playing,
laughing, bustling, and chatting around us; and by th
origin they are so intermingled in every family, that
not look anywhere without seeing them. The qua
pleasing sensations and emotions which they cause
elder part of mankind in daily life is incalculable. F
they seem and powerless as they are, they constitute
proportion of the existing happiness of life. What we
this point is not merely occasional enjoyment, but even a

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become an indolent being; but they give him, as they arise, a perpetual object for his thoughts and industries as long as he lives.

In this respect they are of vast importance to society. The necessity imposed by the plan of Providence on the parent to maintain them, causes them to be unconscious educators and governors of him, imperceptibly even to himself. They guide, and shape, and channel, and moralize his activities, and insensibly compel him to exert these for the good of society in his duty, which he cannot escape, of providing for them until they can efficiently operate for themselves. Thus they train and steady the father as much as he regulates and governs them. They make him a more active, and prudent, and skilful, and trustworthy member of his social world; and again reward him for his care of them, by giving him, in themselves, such friends and assistants as he will nowhere else meet with. None will ever find abroad the disinterested love, the zealous care, the attracting feeling, the active friendship for him, and the desire to promote his comfort, which he can obtain, and may always keep alive and fervent in his filial circle. It is this moral magic, this intellectual enchantment—all natural, in no part artificial—all the emanation of our Creator's design and formation of both our soul and body, which makes home so delightful to every one in all ranks of life. We know that there are beings there who take a kindly interest in us; whom no forms, or doubts, or interest divide from us; whose welfare coincides with our own, and with whom we can reciprocate happiness, confidence, and regard. No competing interests array its members against each other. All are fully known to each other and mutually appreciated. All these benefits arise from the appointed law, that all the young shall be naturally related to the old, and these to the young. None can appear without this affinity; for they come into existence under the sweetest and dearest relationship of life. Hence there are, in a domesticated family, an affection, a feeling, a sympathy, a safety, a confidence, and attachment arising from the relationship and its gradual consequences, which resemble nothing else, and for which there cannot be an adequate substitute. All else that pleases us is of a different nature, and has other results. If these effects be not universally experienced, the fault lies not in the system of the Creator; that is perfect; and it *lies only with* ourselves to give it, univer-

sally, its individual application. None, then, would be without a personal experience and enjoyment of its blessings.

But the young do not merely please and assist; they are also great benefactors to society, in the very qualities and passions which, without the predominance and unrelaxing government of the elder, would be always shaking it into fragments and confusion. Though not so numerous as ever to get the command of the social world, they are enough to act powerfully and usefully upon it; they are continually exciting, enlivening, and agitating it. They diffuse an ever-renewing spirit through it, which, though not strong enough to injure or overpower it, yet is always animating it, and preventing stagnation, and that indolence and apathy which the continued possession of enjoyment, authority, and property usually produces. It is from the younger that our social changes, motivities, and improvements chiefly arise. The fact that, by the plan of Heaven for our world and for our welfare, they are all born destitute of all things, except their bodily frame, and its inspiring and directing soul; and that they shall have to acquire, and must, by their own exertions, obtain their wanted portion of the goods of life, as soon as they become capable of the operation, puts them into the situation of compulsory activity. The young who were in this condition, that is, between fifteen and twenty, were, in 1821, a tenth part of the males, and with those from twenty to thirty, who are also mostly unprovided, and in the act of striving for their own support and establishment, were one fourth of all their sex. These are continually devising and pursuing new schemes, starting new adventures, inventing new means, and urging the aged to new enterprises and objects, which the contented elder would never think of, or willingly take the risk of, or trouble themselves about. But the young cannot, for their own sake, be indolent or satisfied, until they are provided also with what they desire. Hence the two antagonist principles of motion and rest are ever usefully striving against each other; and the result is, that alternate sway and constant influence of both—that excitation and repression; that governed activity and modified repose, by which society is kept in healthful stability and vigour, with progressive advantage.

It is the established system of our natural births, and that arranged succession of them, one after another, in such linked *and unfailing* order and continuity, that no gap or deficiency

of either age or class is ever visible in any congregation of society which have hitherto uniformly produced that course and state of human life as to youth and age under which we live, and which have appeared in every period of the world—youth impelling the social machine—age firmly upholding and preserving it, and restraining and regulating the urgent forces that would disorder or break it. The astronomical orbs are not more potently and skilfully governed by their opposing and ever-actuating impulsions, than the competing ages of human life have been sagaciously adjusted, and are so disposed as to occur with that fitting efficacy in which we find them to be perpetually arriving. But, in either case, though we trace the laws of the motivities, and the phenomena which they have been instituted to occasion, we perceive not the invisible agency, nor do we know the specific process by which the admirable results are so certainly and unceasingly produced, and their harmonizing efficiency is so exactly sustained. The component parts of human society are like the particles of a mighty river, always distinct and inseparable, and ever severing from each other, yet constantly flowing on in streams cohering and incessant; losing themselves by a thousand channels in the great ocean of futurity, but never lessening either in their masses, their movements, or in their relative and sequent continuity. What striking manifestations of plan and government, extrinsic to themselves!

In this arrangement you observe that strength, agility, and vigour are principally given to the young, and thought and knowledge to the elder; and it is by the ages between twenty and thirty-five that the largest part of human labour, and the works which require most activity and exertion, are carried on. Without a class of such beings as the first divisions of our life supply, human nature would be stationary, and comparatively unproductive and unimproving. It is at this age that the love of personal distinction, the desire of fame, the wish to excel, the passion to be forward, ambition, appetites, and eagerness for novelty and employment most keenly stimulate. Hence it is, that from youth the progressive principle of society has been assigned to originate, and has been and is ever issuing and operating; while the later periods of life are compelled, by the energy that assails them, to exert and apply their superior judgment and experience to moderate the moving forces of their *vivacious* offspring, and to turn them into

useful channels. Thus society is equally benefited and continually improved by the guardian character of the one portion of its population, and by the spirit and impetuosities of the other; and thus its various classes are made, by the planned and secret mechanism of our social economy, to be the continual instruments of practical good to each other, from the very circumstances of their arrangement and position, however unintended or unperceived by themselves such a consequence may be.

"There's a Divinity that shapes our ends,
Rough-hew them how we will."*

It has been an interesting part of the Divine system of the living world that there should be so many children in it. These peculiarly embellish it. They may even compete with the female world for the beauty and pleasantness which they add to it. If we were to compare society, in its diversified forms, to the varieties of the vegetable kingdom, though we might rank youth as the nutritious and succulent plants, mature life as the fruit-bearing trees, and age as the venerable forest, we should still more justly deem children to be the flowers of social life. Too young to be useful, yet always pleasing, at-

* I cannot close this letter without citing another passage from Sir Robert Peel's exhortation, because it so eloquently describes the means and qualities to which youth will always owe its most certain success.

"It is incumbent on you to acquire those qualities which shall fit you for action rather than speculation. It is not, therefore, by mere study by the mere accumulation of knowledge, that you can hope for eminence. Mental discipline, the exercise of the faculties of the mind, the quickening of your apprehension, the strengthening of your memory, the forming of a sound, rapid, and discriminating judgment, are of even more importance than the store of learning.

"If you will consider these faculties as the most precious gifts of nature, and be persuaded that they are capable of constant progressive, and, therefore, almost of indefinite improvement; that, by acts similar to those by which great feats of bodily dexterity are performed, a capacity for the nobler feats of the mind may be acquired, the first object of your youth will be to establish that control over your own mind and habits which will ensure the proper cultivation of this precious inheritance. Try, even for a short period, the experiment of exercising such control. Practise the economy of time. Consider time, like the faculties of your mind, a precious estate; and that every moment of it, well applied, is put out to an exorbitant interest.

"When you have lived fifty years, you will have seen many instances in which the man who finds time for everything—for punctuality in all the relations of life; for the pleasures of society; for the cultivation of literature; for every rational amusement—is he who is most assiduous *in the active pursuits* of his profession."

and interesting, whenever rightly and kindly trained
ght; they form three fourths of a moiety of the living
and from the age of birth to fourteen they are nearly
it; and are fully so when, as in America, that half
exceed fifteen years of age.

are divisible into four distinct portions, each highly
ng, but with different qualities and attractions: the
at feeds upon its parent, and requires her sustain-
; the infant that can walk and play, from its wean-
s fifth year; the growing child, beginning to bud into
re youth, and with many of its qualities, from five to
d that youth, with all its expanding bloom, which dis-
new forms much that is interesting in childhood,
developing nature of the future man. Each of these
e proportion to the others; rather more than one
der five, another third under ten, and less than a third
teen.*

have been specially designed to be in these gradua-
succeeding forms; and they all present to us so
ferent modifications of human nature; so many dif-
ecies of human beings; for although it is the same
l that grows up and passes from the one age and state
other, yet, while they are in each period, they are
forms of human beings, with distinct qualities; each
eauty and interestingness peculiar to itself, always
ed and complete, though every year differing from
r state.

ey must have been specially devised to be what they
a careful system and use of means must have been
and executed to make them such. For that there
ren at all, and such a train of different forms and
arisen from and depends entirely upon the fixed
our growth, and upon these having been specifically
nd settled to be what they are. For it would have
easy to make a babe to enlarge into the perfect hu-
ng in one year as in fifteen or twenty. But the
d enlargement, which is so interesting, has been pre-
n order to produce the pleasing effects which result

Many animals soon become complete; but the hu-

* sexes under five were, in 1821, 1,506,268; those from five to
,315; those from nine to fourteen, 1,172,979; out of the whole
of *England and Wales* at that time, of 10,530,971.

man being is delayed in its development, that we may hav
charming ages of children; and what should be a cont
source of further admiration is, that in all these chang
form and age the human being is always a perfect figure

LETTER XXI.

*Sketch of the Plan on which the Female World appears to have
arranged, qualified and stationed.—The Effect of it on H
Society.*

My dear Son,

Our view of the Divine economy of human life will n
so complete as experience enables us to infer it, unles
consider the state of the female portion of human natu
the general course and order of society. It is so distin
many points from that of the male division, and is so d
ently directed, that it deserves a separate examination.

The first great fact which it presents to us is, that
life shows it to have been designed that the chief and ce
fountain of family happiness should be everywhere
Mother. From her, the blessing flows to her wedded
ciate and to her children, to both of whom she is, and
been meant to be, the kindest friend and daily benefact
ever doing something serviceable to them, desirous and
ing always to benefit them, and in her very presence a
stant object of gentle pleasure to them. It was manif
devised and settled by the Creator, in his formation of fe
nature, that this should be the effect; and most success
and universally has his plan been executed.

By the parental system which he has put into cont
operation, the mother is always so circumstanced with he
spring that they cannot see her without interest and symp
from the constitution of their nature, and from the first po
of their life on earth. Their wants and their gratificat
their good and evil of all sorts, connect them perpetually
her. She is the cause, the maker, the provider, and the
tributer of their daily comforts; they perceive, with rapi

at she is their refuge and preserver, and apply to her as such.
e becomes their daily trust and hope; she is as necessary
she is pleasing to them; without her they would perish
n after their birth. To her care, and maternal supplies,
attentions they are indebted for becoming permanent beings
their newly-visited earth, until other agencies remove them
n it. She introduces them to its living society, and trains
m to be parts themselves of its rational circles. She is to
m the immediate and acting representative of that parental
ovidence under whose guardianship we are all subsisting.
ous the female world is, at all times, united with the new
nerations which arise and carry on the stream and progress
human nature by the most influential sympathies and causes
it can interest human beings with each other. The mother
the felicity of being to them a perpetual blessing, and, by
tering and rearing them, of being a daily and hourly produ-
of good, and a giver of happiness. No mother lives in
n; no mother need ever say, "I have lost a day." Empe-
and men may, and too often do, pass many useless, and
e very mischievous days, weeks, and even years; the
ther never, unless she counteracts the very principles of her
being, and becomes wilfully unnatural and unsexual; and
at is that but being half maniacal, whenever any are so?
What the mother is in her maternal life, the rest of the
ale world are likewise, in no small degree, as her allies
ubstitutes, although they may not be parents; for as soon
the daughters become capable of intentional and imitating
ivity, they join her in all her kindnesses and duties; they
re in all her labours, and assist in promoting the benefits
ich she originates and is communicating.
The mother and her daughters become thus, in every family,
fountains and makers of its daily conveniences and com-
s. They must be most unfortunately fractious and per-
se if this be not the habitual consequence of their lives.
e effects may not be noticed by those who profit from
m as proceeding from these living causes, but they must
always thus issuing, for they have no other source. If,
m, the female members of society only keep themselves
n being clouded or disturbed by wrong feelings or rude
nts, they cannot be inmates of any home without these re-
ts naturally and regularly flowing from their daily life, and
ial position, and constitutional formation. A higher power

than their own has so framed them, and by their frame, as it develops, gradually leads them to these utilities.

If the mother have good sense, good intentions, a due knowledge of what she has to do, and the usual state of temper which, by the make and system of her being, has been provided to accrue to her; if she preserve the suavity, and ease, and gentle manner which have been made, by all these means, to be natural to her sex, she will, unaffectedly and insensibly, diffuse around her emanations of these qualities. She will raise in others the placid feelings which are actuating herself. She will look, and speak, and spread the moral beauties which bud, and bloom, and expand within her imperceptibly to herself. What is assumed never, or but shortly, interests. The charm lies in the natural reality; the artificial wearies or dissatisfies, and cannot be lasting or uniform. When perceived to be the mask, and not the genuine soul or features, the detection always prevents the confidence and regard which true benignity creates. Truth has in all things an abiding attraction, which no counterfeit can retain.

But so admirably is the fabric of human life constructed, and are all its component parts arranged and qualified, that if the wife or mother be the true growth of nature, with that cultivation which her intellectual improvement in civilized societies now occasions, she will be the daily benefactress of her family; all her household will find a general comfort about them, originating from her intentions and superintendence. Neatness, quiet, harmony, order, and prudent self-regulation, both in mind and in manners, will, from her example, be the character of that home, of which she will then be the model, the attraction, and the presiding queen.

This is what, in the plan and purpose of Providence, they have been designed to be, and what every wife and mother may be. It is but just to add, that it is only a description of what the female world of Europe and America most generally are; and what those of Asia and Africa would be also, if their paganism or Mohammedanism were to be exchanged for Christianity. This religion is the true patron, friend, fosterer, and exalter of women of all classes; their best qualities are peculiarly congenial with its Divine precepts, and disclose themselves most efficaciously under its supporting protection.

But it will always rest with themselves to be of this character and conduct, and to have this moral enchantment habit-

ually about them. It may be lost or it may be retained; the talent may be buried in the earth; the diamond may lie obscured and incrusted in the mine. But the laws of nature and the Divine economy of human life provide the capacity, the means, and the agencies for all these admirable results; with these the spontaneous will and steady perseverance of the individual mind must co-operate in order to produce the beauties and blessings which they are intended to occasion.

Wherever the female world exhibits these features, it evinces the beauty of the system under whose agency it arises. Nor can we doubt that this character will become more prevalent. The natural desire of both sexes to be what is deemed most excellent while they live, in order to be preferred and applauded, will increase its universality as the improvements of society elevate and refine its moral and intellectual standards. Good taste, right feeling, and sound judgment must become more common; and, as they spread, what they most value and seek for will multiply with the demand for it, and be more enhanced as it is more appreciated. We are all too fond of happiness not to encourage every mode of producing it that becomes perceptible and practicable. Hence the value of the female amiabilities cannot but rise as their benefits are more discerned and felt. Thus, the more they are practised, the higher will be the estimation of them; and the more they are esteemed and wished for, the more common they will become.

Hence there can be no doubt that family happiness will be more sought and enjoyed as the improvements of human nature increase; and this is meant to be one of those improvements. It can, however, only arise from the maternal and connubial virtues and qualities of the female world; and as these are more cultivated, possessed, and practised, the more certain and the more universal will be the domestic comforts which they create. Nothing else can yield such to mankind, because nothing else can cause that quantity of happiness and benefit which they originate. Hence the importance, rank, value, and improvements of the female portion of human nature will advance in every state, with its moral, religious, and intellectual progression.

There seems to me to be no reason to doubt that, from the causes which we can discern to be now in operation, our world will become happier in every succeeding generation;

and that it is the plan of Providence that it should
A new moral spirit seems to be imparted to human na
promote this effect; but the great streams of human
ness must always come from the domestic source
therefore mainly from the female world. To this en
must participate in the improvements which take place.
are visibly advancing in a fair proportion of these; a
thereby be always on a level with their age, and, from
king in the general progress, will continue to be the n
fluential instruments in realizing whatever further bene
of earthly felicity it may be the design of the Creato
stow on his human race. Transgression having been
troducer of evil, the moral improvement of the world
expected to be attended with an augmentation of ind
happiness. Hence there is no just ground to suppo
society is doomed to be more wretched, if its popu
should continue to multiply.

The relative position in which the female sex are
by the natural laws of life and death, contributes gre
their influence on society.

On surveying the table of the living population in E
and Wales in 1821, we perceive that, of the ages fr
birth to fourteen years old, there were more boys tha
existing in society;* but from the age of fourteen
longest period of human life, there were most females
the English world.† This is a remarkable circumstan
cause it falls in the most important seasons of life; a
larger quantity of women is the greatest in the mature an

* The males then in England under the age of fourteen were 2,
the females 2,026,512; making a difference of 62,538 more males.

† From fourteen, the greater number of females living in Engl
Wales in 1821 were, at the successive periods—

From 15 to 19	25,983
20 to 29	145,558
30 to 39	55,845
40 to 49	18,648
50 to 59	9956
60 to 69	17,675
70 to 79	9616
80 to 89	6728
90 to 99	1027
100 and upward	69
Making in all	291,105 more

than males at these ages.

fective portion of human life; I mean the period between enty and forty. In this interval they exceeded the males above 200,000.* This occurs in the time of their life en most are mothers, and when all are performing important ces of kindness, care, and duty in society. Men, en-ssed by their civil and political employments and pursuits, re but little in the private education, the daily management to the moral and religious cultivation of their household. this is usually performed by females; and we find they made to be more numerous at the period when they are st wanted for human benefit and improvement.

This does not take place accidentally; but is really pre-red for in nature, and prepared for by the fact that fewer fe-les die between their birth and the age of fourteen than of males. The difference is so great in the distribution of the rtality of this season of beginning life, that above 122,000 re males then die than females;† that is, 122,000 fewer ales die, and, by that means, 122,000 more young women w up to be the useful members and helpmates of society, n could have been in the world if the laws of death had n suffered to operate on them when girls as actively as y do on the other sex when boys.

That this difference, at this part of life, is the result of Divine ngement and not of accident, seems to me to be indicated the sequent fact, that in the next period of existence, be-en fifteen and forty-five, the proportion changes, and most ales die.‡ When we recollect that this is the section of ir life in which they add to the world the new race that is succeed them, we see the cause of its greater mortality to m; but yet even this is so governed, that although more them die than males during these thirty years, yet still they

* The excess was the two numbers above stated between these ages, g together 201,403.

† In Mr. Rickman's table of the burials for eighteen years, between 3 and 1830, the number who died under fourteen were—

Of males	865,037
Of females, only	743,000
Making more males	122,037

‡ The number of deaths between fourteen and forty-five was—

Females	453,751
Males	405,481
More *females buried*	48,270

exceed their more robust and less endangered companions by the larger living numbers to which I have already alluded.

Again, the care and benefiting wisdom by which the laws of death are administered appear to us in the subsequent application of them. In the twenty years from forty-five to sixty-five, more males were taken off:* from sixty-five to seventy the proportions a little alternate between those who die of each sex;† but from seventy to one hundred and seventeen, when the female world have discharged all their maternal and worldly duties, and have become less necessary to society, and are then rather its venerable ornaments than its helpers, the largest proportion of deaths falls continuously on them.‡ Yet here again, so modified is the removing operation, that, although they die most numerously, they are still the largest number of the living, and even to the last extremity of human existence; for there were above 1000 more females than males at the age of ninety,§ and 69 more at that of one hundred.‖ They even had the triumph of the most protracted longevity in the catalogue of the eighteen years' deaths; for the longest liver who is recorded to have died in that time

* Males	316,977
Females	301,495
More males	15,482

† At sixty-six and sixty-seven were, males, 39,512; females, 39,855; being 343 more females; but at sixty-eight and sixty-nine the alternation was 35,131 males and 34,520 females which made 611 more males.

‡ The comparative deaths, in Mr. Rickman's table, p. xxxvi, were as follows:—

AGE.	MALES.	FEMALES.
70 to 74	104,494	108,314
75 to 79	97,714	102,714
80 to 84	77,327	89,010
85 to 89	39,399	47,075
90 to 94	11,607	16,491
95 to 99	2879	4813
100 to 104	546	1091
105 to 109	75	152
110 to 114	11	18
	334,052	369,678

Presenting, in the ages from seventy to one hundred and fourteen years, 35,626 more female than male deaths.

§ Of the age of ninety the males living in 1821 were 2253; the females, 3260.

‖ Of one hundred and upward there were 60 males and 129 females.—*Rickm.*, xxxvii.

lasted to one hundred and twenty four, and this was a female.*

On the whole, there were, in 1821, living in England and Wales, of all ages, 227,567 more of the feminine sex than of the other.† Thus the living fabric of society in this part of our island was composed of 62,538 more boys, in the ages under fifteen, and 291,105 more grown up females, in all the subsequent years from fifteen to the duration of a century and more. So that female mind and habits were operating in our social world nearly a fortieth part more than the male, as far as greater numbers and maturity affected it; for this superior quantity was that of the female mind in the two periods of its most pleasing and its most serviceable state, and thereby of its greatest influence, especially in all that relates to the nurture and education of the young, and to the direction, tone, character, and government of domestic life; and not less so in all that power and benefit which sensible women unassumingly exercise and impart to sensible men in their counsels and conversation, and by their example and manners.

It is the female world which chiefly cements society together, and gives it kind and tender feelings, and neighbourly friendliness, the love of peace and repose, and mutual esteem and good-will. Their natural regard and sympathies for the other sex incline them to its society, draw it into theirs, and, by promoting the desire to please, contribute to increase the amity and attachment of men to each other as well as to themselves. They foster and circulate the amiable sensibilities, and give a perpetual popularity to the gentle and obliging disposition; to that softened state of mind and manners which is peculiarly efficacious in civilizing and regulating the human strength and energies. The virtues and qualities which most beautify the human character are most natural to the female nature in all its ages, but are less so to the male beyond his infancy. His greater powers, impetuosities, and activities suppress their influence as he rises into manhood and vigorous employment. As he grows into this, the emulations and ambitions, the strivings and the contests of human life then ex-

* Rickman, vol. i., p. xxxvi.

† The whole living were—

Females	5,379,619
Males	5,152,052
More females	227,567

cite more of his attention, and make him a partisan in the busy world where all are struggling so earnestly and so pertinaciously for distinction, property, power, enjoyment, and superiority. It is in the female characters about him that he sees and feels the interestingness and the utilities of the more tender feelings, of the affectionate heart, of the mild and gentle temper, of the kind manner, the obliging readiness, and the desire to please; of social peace and quiet, and of those endearing comforts and placid happiness which the female world in its various conditions of mother, daughter, sister, wife, relative, or visiter, is continually producing or extending.

From all these considerations we may discern the arrangements of the Creator as to female life to have been admirably planned. Fewer females in their childhood and girlish age than boys; but from that period, more of them than of men, after they become capable of being the cause, aids, and rulers of a household; more always in the mature population. Thus the larger part of the coexisting generation consists of females, living always in their homes, and tending their young families and relatives, and pervading general society as its most regular and continual guides and supporters; while the active labours of male life call that to different habits in the public scenes and occupations of the world; and it cannot, therefore, be so efficient in the moral direction and education of private society and of the growing mind.*

The benefits of this part of the economy of human life are felt in all stages of its political condition; but least in the savage and uncivilized tribes and eras. They increase with human cultivation, and will here preponderate as education disciplines the mind, as suitable knowledge enlarges its thoughts and views, and as religion elevates and purifies its feelings, hopes, and aspirations.

* There are more males alive than females under fourteen, because there are more born; but female infants appear to outlive the male ones, for above one fifth of the males born died in their first year, but only one sixth of the females. One third of the males born were dead under three, but not one third of the females till under six; thus in seven years there died, within the first year of their age, males 167,717; females 130,935; making a difference of so many as 36,782 less females dying at that early period; of one and two years, males 83,636; females 78,460; being 5176 less females. In the three next years, or under four, five, and six, there were 1347 less females dying; so that 43,305 more female *children* than males lived to attain the age of five years in England and *Wales* from 1818 to 1824.—See Rick., p. xxxvii.

The present state of American society differs from ours in
compartment of it; and moral consequences seem to fol-
from the diversity, and will probably continue to do so,
ess some improvement in the habits of life lessens the pres-
ratio of mortality among its female classes.
nstead of females being, as in England, the larger number,
the whole census in the United States in 1831 the males
re the most numerous body, in a population nearly the
ne as, in 1821, was the English amount.* Up to fifteen
rs the females were, as in England, fewer than the males.†
ey were more in the next five years of age between fifteen
d twenty;‡ but from that time of life to the period of eighty,
men always surpassed them in number.◊ From eighty to
hundred, the aged women were the largest portion,‖ but,
he centurial duration, the men were in greater number.¶
The result of this comparative position of the two sexes in
erica is, that in all the most active and mature ages of life,
men are more numerous than the women. It corresponds
h our preceding views, that there is in America more of
style of conduct and manners which characterizes the
moral and civilized population. America is at present

The free males were		5,358,569
Females		5,167,299
More males		191,270
The comparative numbers under fifteen were—		
Males		2,426,51
Females		2,310,816
More males		115,703

Males, 575,614; females, 597,713.
The series from twenty to eighty was—

	MALES.	FEMALES.
rom 20 to 30	952,902	915,662
30 to 40	592,596	555,565
40 to 50	369,370	355,425
50 to 60	230,500	222,928
60 to 70	134,910	130,866
70 to 80	58,136	58,034
	2,338,414	2,238,480
	2,238,480	
Most males	99,934	

From eighty to one hundred were 17,938 males and 20,056 females. Of one hundred and upward, males 274; females 234.—Flint's Mis- Valley, vol. ii., p. 229.

deficient in that superior proportion of females and aged persons which so much increases the social repose, moral habits, and sound judgment of the English community.*

The mildness and kindness of female nature seem to be its characteristic in all regions and societies. We know this to be the fact throughout Europe, and we find it as much so elsewhere, and in the rudest as well as in the less cultivated nations. It influences the conduct of the sex in Turkey,† it actuated the feelings of the negro queen in West Africa,‡ and has been observed to prevail in New Zealand.§ We see it prompting an American lady to resolve to emancipate her slaves, though with a heavy pecuniary loss, as soon as she had acquired the right to do so, and to take much trouble to purchase the full property in them that she might effectuate her wishes—a rare instance of such persevering and disinterested humanity.‖

* The American press may be quoted as the best judges on this point. In the American newspaper called "The Philadelphia Gazette," which is considered to be conducted in an able and moderate spirit, we read:—"Revenge, riot, and intemperance seem to have their perfect work in every section of the country. Exhibitions are every day made of lawless excess, of infernal jealousy, of cold-blooded malignity, of most debasing sensuality, of utter recklessness of life, and entire disregard, if not disbelief, of a futurity. Murders, robberies, gambling in all its varieties, suicides, and mob-outrages have become frightfully frequent." Several of the sermons of the present American divines express similar complaints of the spreading demoralization of the general mass.

† The mildness and kindness of FEMALE nature appear in all regions and societies. One instance is at this moment before me, in the seraglio of the Bosphorus. "The island Scio had been granted out to several successive sultanas, nearly connected with the reigning monarch. Under these gentle taskmistresses (for such has been almost uniformly the character of Turkish females of high rank) the people had attained the highest degree of cultivation."—Ed. Rev., vol xiv., p. 135.

‡ When in the negro kingdom of Boosa, Mr. Lander says, "On our return here, the face and hands of my brother and myself were much swollen and highly inflamed by exposure to the sun. This circumstance excited the queen's sympathy almost to tears."—Lander, vol. ii., p. 101.

§ Mr. M'Donnel remarks of the sex, among the as yet uncivilized people of these islands, "The women possess great kindness of heart; and those who are married are seldom guilty of infidelity."—Metrop., 1834, p. 326.

‖ When some American philanthropists were forming their colony of Liberia in Africa for emancipated negroes, a lady wrote to the secretary: "I have deferred making a direct application, until I obtained a full and legal title to them, which I might be able to transfer. I have laboured incessantly to effect this end; and I am now in full possession, as lawful purchaser, of twenty-five negroes, and I propose to dispose of *them in the* way which may appear most advisable for their benefit. My

We see the maternal feelings as strong and provident in the Indian women of North America as they could be among our own, notwithstanding their savage and suffering mode of life.* Among the wild tribes of this quarter of the globe, they have such curious and retentive minds as to be the traditional historians of their nation.† Indeed, in other uncivilized populations, they have been found to display no want or inferiority of active intellect when they have been permitted or encouraged to exert it.‡ We may infer this to have been at all times the case, by so many of the distinguished nations of antiquity having been governed by queens—a kind of sovereigns that always imply willing and happy subjects, because

situation is such as precludes the possibility of my doing more than to give them their freedom. They are awarded to me at a valuation of 4100 dollars. They are young and promising—a number of young boys, some young girls, and a few old persons."—North Amer. Rev., No. 76, p. 147.

* Dr. Richardson states: "The Crees use a cradle extremely well adapted to their mode of life. The infant is placed in the bag, having its lower extremities wrapped up in soft sphagnum, or bog moss; and, without the least danger of tumbling out, can be hung up in the tent or on a branch, or be suspended on the mother's back by a band which crosses the forehead, so as to leave her hands perfectly free.

"The sphagnum in which the child is laid forms a soft elastic bed, which affords such a protection from the cold of a rigorous winter that its place would be ill supplied by cloth. The mothers are careful to collect a sufficient quantity in autumn for winter use.

"Both sexes are fond of their children. The father never punishes them; and if the mother, more hasty in temper, sometimes bestows a blow or two on a troublesome child, her heart is instantly softened by the roar that follows, and she mingles her tears with those that streak the smoky face of her darling."—Franklin's Voy., p. 69.

† Dr. Franklin mentions this fact: "The Indian women till the ground, dress the food, nurse and bring up the children, and preserve and hand down to posterity the memory of public transactions."—Remarks on the Savages, Works, vol. ii., p. 116.

‡ The American missionaries to the Society Islands in the South Sea, in 1834, stated: "Most of these islands are governed by women. They preside at the debates of the chiefs on the public affairs of the island, and take an active part in them. The meetings are open to all the natives; and, whether of high or low degree, any one is allowed to give his opinion on the subject in question. In these debates the women generally evince mental qualities superior to the men, and also surpass them in their attainments at the missionary schools."—American Papers, Dec., 1834.

It seems, however, that it was Christianity which had brought these qualities into light and action; for the same letter adds: "Since the establishment of the missionaries on the island, the condition of the women has undergone a great change. From a state of abject slavery and misery they have become *comparatively* free and happy."—Ib.

so much more easily displaced if their rule should be offensive.*

In Russia, so frequently governed by empresses, who have largely contributed to its national prosperity, the gipsy females are highly distinguished for their talent of vocal music, and are found fit to hold a station in its aristocratic ranks, when they have been selected for their attractions to be so elevated.† But perhaps one of the most natural effusions and exhibitions of the affectionate sensibility of the female heart, in its earliest, purely native, and instinctive form, is the emotion displayed by a Hungarian child towards a bear that had nurtured her.‡

The Chinese females deserve our notice and applause for that union of gentleness with steadiness and patient endurance which everywhere claims and affects our sympathy. They displayed these qualities unaffectedly and unpretendingly lately at Canton, under the terror, agitation, and distress of a great sudden conflagration there.§

* You will remember, from your historical studies, several celebrated queens; Semiramis of Assyria, Nitocris of Babylon, Cleopatra of Egypt, Artemisia of Asia Minor, and Zenobia of Palmyra. In 1770, Mr. Swinton published, in the "Philosophical Transactions," the description of a coin bearing the veiled head of a woman, which, from the characters on it, he showed to be Philistides, the QUEEN OF MALTA and GOZO, before the Carthaginians became possessed of these islands.—Phil. Trans., vol. lx., p. 80.

† "Of the gipsies, or, as they style themselves, Rommany, there are several thousands in and about Moscow. The female gipsies are the most distinguished, having, for time immemorial, cultivated their vocal powers to such an extent, that although in the heart of a country in which the vocal art has attained to a greater perfection than in any other part of the world, yet the principal gipsy choruses in Moscow are allowed to be unrivalled. The sums obtained by these performers are very large, enabling them to live in luxury of every description. Many of them are married to Russian gentleman."—Athenæum, 1836, p. 588.

‡ "At a late bear-hunt in Hungary, the hunters succeeded, after much difficulty, in killing a very savage she-bear. She was scarcely brought to the ground, when a young girl about twelve years of age rushed from a thicket, and *threw herself on the dying animal, making the greatest lamentations.* With considerable trouble the huntsmen contrived, by means of cords with running knots, to capture the little savage. Inquiry being set on foot, it was ascertained that a country-woman had lost her child about twelve years before, and had never been able to discover what had become of it. The girl has been placed under the care of the Countess Erdodi, who has commenced her treatment by feeding her on roots, honey, and raw meat."—Gazette des Portes de Frankfort, March, 1835.

§ *Their behaviour* is thus described in a letter from Canton, dated No-

In this extraordinary nation, in some points so laudable, in others so unfavourably peculiar, the character of their women is of such kind and impressiveness as to lead one of its popular writers to sketch the female excellence he delineates as combining great delicacy, cautious modesty, gentle manners, scrupulous fear of censure, a love of honour and reputation, with fixed principle and high-minded virtue.* In his own

ember, 1835, detailing the destruction of the new city of Canton by ire: "The alarm was given at eight o'clock in the evening, and the ates were closed. The wind freshened, and the flames spread south, ast, and west, and raged all night. The streets of the suburbs were hronged by a dense crowd of people, conveying their goods, or guiding heir females and aged relations. The clamour of men and clash of weapons as they cleared the way—the shouting, screaming, threatening, and complaining were horrible. At two o'clock it had burnt down the Chuhian gate. At that time the females and children of many families were on the walls, sitting or lying on their furniture; while others were supporting and guiding their helpless, bedrid, aged, and blind relations. The behaviour of the women was particularly remarked; it was most admirable. No complaining; no screaming; no fainting; but calmness, resignation, and self-possession. The tones of their voices were watched, as they occasionally gave direction to their children or servants; and they were bland, subdued, and polite. The sight of a burning city is dreadful anywhere; but its horrors are multiplied in China."—Public Papers, 24 March, 1836.

* As poets and novel writers, when they sketch human manners, usually draw from characters they are acquainted with, I consider the descriptions of the Chinese author of "The Fortunate Union" a representation of the Chinese ladies he most admired. His heroine was Shueyingsin.

"Her eyebrows were like the slender leaflet of the willow in spring; and her whole aspect that of a delicate autumnal flower. Brought up tenderly in the retirement of the female apartments, she surpassed in delicacy a silken tissue. Still, however, when the occasion called for it, she possessed talents and resolution beyond many of the other sex."—Vol. i., p. 50.

The sentiments ascribed to her, in her conversation with her uncle, who was unjustly persecuting her, are highly creditable to the female character of China in its most respectable class.

"The violation of the laws to evil and cruel purposes," replied Shueyingsin, "may make the frail humanity of a worthy and exalted character tremble; but such natural feelings will never compel it to descend from its moral elevation: for, being governed by a fixed principle of rectitude, the presence of the emperor himself will never force such a character to degrade itself."

On his further urging her to what she deemed wrong, she answered, "The proverb says well, the winter insect must not talk of summer: the ephemeris (the Hoeykoo) never knows spring and autumn. We are all best acquainted with the nature of our own situations. Let me beg of you, uncle, to mind your own affairs. Your niece knows that there are such things as propriety, virtue, reputation, and self-government. In comparison with these, happiness and misery are indifferent

person he likewise ascribes the preservation of morality among his own sex to the influence of such examples,* and shows, by the verses which he adds on his heroine, that he felt what he delineates to be the natural beauty, as well as the cultivated excellence, of the female spirit.†

Thus in every country the peculiar amiabilities of the female mind are felt to be distinguishing moral beauties to it; are valued as such, and are everywhere disclosing themselves. The male spirit, however entangled with other habits and absurdities, yet is interested by the more delicate and gentle nature of his allotted companion, as long as she preserves her attracting virtues, undebased by what sullies and destroys them. She is, however, susceptible of such degradation; she may become all that is most odious and abhorrent. It is painful to find that such a perversion exists at present in

to her. Pray, then, give yourself no uncalled-for anxiety on my account," p. 235.

"To die once is nothing in comparison with the loss of virtue," p. 248. —The Fortunate Union, translated from the Chinese original by J. F. Davis, 1829.

* "Reason's highway is straight and plain; unlike
The crooked, devious path of worthless men.
Did not a faultless heroine sometimes shine,
Virtue's great cause entirely would fail."—Ib., p. 82.

† "Her nature was ardent in the cause of virtue,
Though the softness of her affections was easily influenced.
To blend thus the warmth of passion with the rigidness of principle,
Is the perfection of moral excellence."—Ib., vol. ii., p. 257.

"Wonder not at this female,
With slender waist and delicate hands.
Her heart, though warm, was pure;
Her temper chaste as ice;
In the singleness of her purpose she relied upon herself;
Unconscious of wrong, what need had she for distrust?"—Ib., 251.

"While her father's wish was yet undivulged,
The daughter's heart already understood it."

* * * * *

"Mildness, without yielding, constitutes true firmness:
Would you seek an emblem of mildness and resistance combined?
The watery element affords the fittest illustration."—Ib., 259.

On being introduced to the emperor: "the son of Heaven turned his eyes upon her, and saw that she surpassed a flower or a willow in delicacy and grace." Her firmness in right conduct was the chief subject of his imperial commendation.

"We know that the relative duties are most honoured by a strict observance under circumstances of difficulty. The excellence of virtue *lies in* continuing inflexible; particularly when secrecy affords opportunity."—Ib., p. 205.

pital of a country whose females have been praised for prightliness, good feeling, and kind manners ; but Spain great moral improvement :* yet all large cities have some table anomalies ; and we may class this among those of rent, but still deplorable description, which disgrace our

But even for the existence of these we must accuse our ex ; for what are they but the victims of the men who, ir own selfish ends, have deceived and corrupted them ! very sensibilities, then, make them both more misera- d more evil beings, increased by the utter hopelessness espair of obliterating the past ; of recovering their for- ank or estimation ; or of obtaining any creditable means bsistence. To such wretchedness does the self-gratify- /ader lead and consign the female spirit he seduces and s. The human ruin and misery of the suffering indi- become in time so complete, that it can never be surpri- at a temper half demoniacal should occasionally result t. Nothing but the native good qualities of the female prevents this effect from following universally such a ; but these are so generally indestructible, that even emorse, famine, contempt, and disease cannot wholly ays overpower their instinctive operation.

American traveller in Spain has given us the following account, ed in 1830 : " Perhaps there are no women in the world posses- aracters more strongly marked with reckless crime than those of er class in Madrid, known by the name of Manolas. Unheeded olice, and abandoned to their own vindictive passions, the bar- which they live are the nightly scenes of violence and murder ; only intimation which justice has of their crimes is when the dead f the murdered of either sex, instead of being concealed, are thrust the street. As many of these women habitually carry *open* hrust through their garters, the means of dealing a death-blow is hand."—Spain Revisited, by an American.

LETTER XXII.

The Aged Class of Society considered.— State and Proportion of i in England and Wales.—Review of their Character, Position, Utilities in the Living World.

MY DEAR SYDNEY,

We find every population on the earth, and nearly e family, consisting of persons in the three succeeding stage life—the young, the mature, and the aged; presenting t at all times a living picture of the beginning, the middle, the end of our designated earthly existence. The proport of these to each other have been already noticed, and t mutual utilities likewise. I would now direct your atten for a short time to the consideration of the last division, w we characterize as the aged portion of society. It has be continual part of the Divine economy of our world th should, in all its societies, contain a certain portion of class of its human beings, intermingled with the rest, but rying in the length of their protracted duration. They l outlived all the causes of dissolution which have taken the great bulk of those with whom they were coexisting; have advantages, qualities, utilities, and purposes peculi connected with themselves, by which they are separated distinguished from all the younger portion of the commun

In 1821 the state of living society in England and W comprised ten millions and a half of both sexes. Of t the aged formed nearly a thirteenth part, if we date this c of seniority from the attainment of the sixtieth year of hu life. At this period of it the character and qualities of age begin to be most visible and operative; and those had reached this duration formed at that time an amoun 791,997 individuals of both sexes; being in number, at latter end of human life here, about half of those who wer its commencing period, or under five years of age.*

* The males of sixty and above were 358,441; the females, 413,55 Rick., p. 37. Those under five were 791,579 males, and 774,689 fem —*Ib.*

This aged portion of society were distinguished from each other by the differences of their respective seniority. Two sevenths of them were between seventy and eighty; not quite a twelfth between eighty and ninety. The first being equivalent to almost one forty-fourth part of the whole population; the last being only a hundred and sixtieth portion. Only 5533 of both sexes were between ninety and one hundred years, being only 1 in 1903 of the whole community. The very few who had reached one hundred years and above were only 189; being but as 1 in 55,717 in a population of ten millions and a half.* Of those enjoying this extreme longevity, two thirds were females.

In all periods and states of society we find such a class existing; and in proportions, though not so large as this, yet always of sufficient number to make it a distinct order and stage of every population. In conjunction with the mature, they form, as before remarked, the consolidating and stable body of all societies; presenting always a remarkable contrast to the interesting divisions of infancy and childhood, as well as to the ardent, fearless, vigorous, imaginative, enterprising, and restless youth.

A distinct moral and intellectual character from these has been assigned to the aged members, and is generally acquired in some degree, and is most usually sustained by them. This, in its completeness, is such as they gradually and spontaneously form out of their accumulated knowledge, their varied observation, their long-exercised judgment, their repeated experience of the results of earlier fancies, hopes, speculations, and pursuits, and their more solid reasoning and calmer wisdom thence arising. They are more convinced of the need of self-government by the sufferings they have endured from many unrestrained self-indulgences; and, by the changes in their bodily constitution, they are more able as well as willing to practise it.

All these elements of wiser life bring with them a sedate-

* Rickm, p. xliii. The numbers were—

	MALES.	FEMALES.	TOTAL.
60-69	231,509	249,184	480,693
70-79	115,032	124,648	239,680
80-89	29,587	36,315	65,902
90-99	2253	3280	5533
100 and upward	60	129	189

Ib., xxxvii.

ness of resting mind, a love of repose, a contentedn
moderate comforts, settled habits of conduct, and an
sition to further competitions and exertions, whic
their existence an advantage to society as well as t
selves.

As a possession and gift of existence, which has
permitted or granted to all the rest of the generation,
they are the surviving portion, old age may be consid
those who enjoy it as one of the greatest blessing
their Creator has bestowed upon them. It is a speci
faction of which they are the subjects; for such a cla
ciety could only be in it, from the laws of death
modified in their individual cases as to produce thi
The plan of life as to all the ages has been deliber
ranged and steadily sustained; and could be carried i
stant execution, as it has been, only by a continual
ment and adjustment of the annual births and deaths,
cause society to be always composed of these various
ing stages from infancy to old age.

That such a portion of the aged shall always be in
ing world has therefore been a special ordainment o
dence, specially effectuated by the specific process w
been established, and is ever operating to this end.
individuals this section of human life shall from time
be composed, is the selecting determination of the
tending Sovereign of all, made on the principles on v
regulates human life in its individual application; but
choice and a favour extending only to those who rec
benefit of it, their personal gratitude to the Almighty
what he alone can grant or take away should be as u
as the prolongation they enjoy. It is a temporary pr
which none can claim or deserve, but which shoul
the desire not to use it unworthily; the gift makes
imperious on those who have it, to show, by right
and thankful feelings, and obedient heart, that a lon
tinuity of existence may not be unfitly granted to ther
in this world or in that which is to succeed. Misu
gevity here can be no recommendation to the additic
endless life hereafter, as it gives the strongest evide
the future blessing would be misemployed.

It has been an admirable plan that human society sh
composed of all ages, countenances, figures, and de

stature, from infancy to senility; and that each should act and feel according to its own powers and qualities. On this system our living world is, at all times, a more picturesque, beautiful, interesting, and useful community, than it could have been if the Creator had chosen to cause all the new generations to appear in complete manhood at once, as Adam was formed; or had ordained them to grow up suddenly from the earth into full maturity, as in the Cadmean fable of the Theban population.* Both of these modes of origin were possible, and equally easy to the Universal Maker.

But he has preferred and still adopts the scheme of causing every population to be that mixture of all the stages of human life which makes society a vast and multifarious drama of increasing interest and animation; in which all are performing their allotted parts, with a mutuality of benefit and pleasure which never diminishes.

This plan of our social world is peculiarly favourable to its daily happiness as well as to its general beauty, and seems to have been devised with express reference to its agreeable effect. All mature would have made life a mere counting-house of business or an arena of warfare: all aged would have weakened and saddened it: youths alone would have disordered it; and childhood only would have converted it into a babyhouse of whim and folly. But on the scheme which has been adopted and realized, there is always enough of the elder, for the most important offices and substantial realities, to secure the stability of the social fabric; and this being provided for and thus upheld, all the others become agreeable ornaments and exhilarating companions to it. The scattered groups and moving forms of the younger are always pleasing; it is they who cause the story of life to be so often poetical and pathetic. Living chiefly on their fancy and feelings, and

* Ovid's description of such a mode of producing mankind is pictorially sketched. When Cadmus had killed the dragon, Minerva orders him to sow the serpent's teeth in the ground he tills, as the "populi incrementa futuri."

"Paret: et ut, presso sulcum patefecit aratro,
Spargit humi jussos, mortalia semina, dentes.
Inde (fide majus), glebæ cæpêre moveri:
Primaque de sulcis acies apparuit hastæ.
Tegmina mox capitum picto nutantia cono:
Mox humeri, pectusque, oneratæque brachia telis,
Existunt, crescitque seges clypeata virorum."

Metam., l. iii., v. 104–110.

fond of activity, it is from the ardent, adventurous, hoping, restless, day-dreaming, and struggling youth most moving, agreeable, and startling incidents o Ever pursuing meteors of their imagination; often lik ing stars themselves; elastic in nature, and boundi disappointment, their wishes, passions, and projects ar infusing into the world they mingle with a vivacious vigorating influence. But the inexperienced Tel wants perpetually his Mentor; and the aged supply life the presence and services of the Palladian sag Homeric fable, so intellectually continued and expa Fenelon, is a parable of our living world. Youth lessoned, and guarded by age, is a dramatic represen the plan on which our social economy has been frame still conducted. The aged are thus indispensable ele human life, and are so arranged as never to be absent

This is a settled law: and the agencies and ratios are so governed, and the preceding stages are by the moved, that all population shall have their needful pr of these conservative seniors.

But the aged are not only designed to be the cou the directors, safeguards, and intelligent rulers of though rather by pervading influence than by exerted a but they are also always subsisting with other great to themselves, and to all those with whom they ha ordinary intercourse and neighbourhood. It will be think of these advantages, because the remembrance will increase their utilities, and the gratification deriva them.

Human life has, in all its stages, two great PURPO two great OBJECTS continually connected with it. T POSES are good to the individual himself, and good society to which he belongs, and thence to human nat erally, as far as the effects of his existence may exten OBJECTS are his present comfort and improvement in l ent life on earth, and the preparation, adaptation, an tion of his undying spirit for those scenes of its futu which lie beyond the grave. For, however we may fo fact or be insensible of it, we have been created to be ings of two worlds—of that before us with which familiarly acquainted, and of that to which death wi *duce us*, but of which we can now obtain no knowle

cept what revelation supplies; and this has spread before us *most* momentous prospects, awful beyond adequate description, inspiring beyond the power of fancy to exaggerate or surpass.*

The good to the individual must have reference to both these objects, or it will not merit the character of a benefit. To deserve the name in its reasonable fulness, it should have greater relation to the grander scene of his unceasing being than to the brief present one which is always temporary and limited. Now nothing seems to be a greater benefaction to any one than attaching to his life on earth such a state and stage as that of old age; and nothing may be made a greater blessing to all who live to attain it, and who will derive from *it, with* enlightened firmness, its deducible utilities. The kind purpose is as obvious as the produced advantage.

At sixty, the ties of busy and social life become loosened upon us; we are no longer climbing, competing, or struggling, or we can no longer do either with effect. The stronger and more enterprising are pressing forward themselves, and age finds itself compelled to leave to them what it has become unable any longer to pursue. Hence the constitution of our

* The certainty that there is a futurity of some sort or other awaiting every one, creates, insensibly or involuntarily, even in those who most desire or endeavour to disbelieve it, an uneasy apprehension about its nature and consequences as it approaches. Many instances show that no skepticism can destroy the fear or the belief of such possibilities. The Colonel Chartres or Charteris of the last century is an instance of this. He was so notorious for his avarice, rapacity, and profligacy, that both Pope and Hogarth made him one of their points of satire. Yet, though he had lived in contempt and violation of all moral and religious obligations, when his final hour approached, nature and reason roused a sense, that some of the results which he had most ridiculed were not impossible to him. We have an intimation of this feeling of his mind in the private letter from the Hon. J. Crawford, dated Edinburgh, 27th Feb., 1732: "I acquaint you of the death of the famous Colonel Charteris, regretted by none. He has left no less than 14,000*l.* sterling a year. Upon his deathbed he was exceedingly anxious to know if there was such a thing as hell, and said that he would give 30,000*l.* were he assured there was no such place."—Private Letter from the MSS. of Prof. Woodrow, Fraser's Mag., 1834, p. 334.

Hogarth painted him in the first picture of his "Harlot's Progress" as looking on the young victim of a procuress; and Pope has thus signalized his name—

> "Shall some old temple, nodding to its fall,
> For Chartres' head reserve the hanging wall?"
>
> Essay on Man, book 4.

nature turns and weans the mind from the ambitions and excitements of worldly life, or makes disappointment the result of any pertinacious efforts to be the bustling actors and contenders that we may have been before. The very changes in our body prevent and disincline us from being any longer wrestlers or combatants in that arena from which we are about to be withdrawn. Our frame and functions have been expressly constructed so as to produce this effect upon us at this period of our earthly duration. These alterations disable the individual spirit from being or doing any longer what it was and did in its younger capacities. The internal changes increase as we advance to seventy years and beyond; and thereby the mind is brought into a state of vacancy, quiet, and serenity as to all the endangering, agitating, and occupying *pursuits*, passions, projects, conflicts, and perturbations of the present world, which, by their opposing effects, exclude the due consideration of any other.

To all these old age brings its natural anodynes—the sedatives that act most efficaciously on the ethereal nature of its vivacious personality, and which gradually draw the spirit to that pausing tranquillity of thought and feeling, that suspension of all that would impede its better thoughts and further improvement, which peculiarly suit the grander objects that are now awaiting it, and to which nature is pressing it with an accelerated force and irresistible certainty.

Protracted years thus enable and dispose the aged to give that more direct and continued attention to the next stage of their being to which they are unavoidably advancing, but which, amid the activities and enjoyments of younger *days*, they were less able or less inclined to think of.

The bodily changes of age are likewise admonitions to it to regard itself as a being who is not to be much longer a residing or abiding portion of the present world, but who has decidedly commenced his journey to another, or who soon will be conveyed to it. To this region, though its position and circumstances be involved in obscurity, age then invites us, and peculiar circumstances are always arising to give its thought this direction.

Age outlives every day more and more of its former hopes and attachments, and of all connected with them. Its preceding friends and acquaintances die off in every succeeding *year*; often in every sequent month. Those who were most like

self, who grew up with it, and with whom it had most sym-athies, most views, and hopes in common, disappear to return o more. It finds itself surrounded by others, who, because ey are younger, have not the same ideas and feelings, nor re forming the same plans or prospects. All things become ewer and stranger to it. The state of public events also has ndergone mutations as striking, and passes into a contrast hich increases with our years. Hence old age, if it reflect n itself as others think about it, cannot but feel itself less dapted to the world around it, which, from its own novelties, eems its seniors as no less dissimilar to them, and at times ncompatible with them, or with their views and purposes. There is an impression in all the classes younger than itself; hat age ought to be attending more to the better country into hich it will soon enter than of that in which it is still linger-ng. The more it is seen to do so, the more it is respected; nd if it act thus, the more respectable it will become, and e less it will be in the way of its juniors; for it will be ursuing objects with which no others will interfere. Age an thus be ever seeking and enjoying a happiness of its own, hich cannot offend or injure any one. In addition to this ersonal benefit, we may add, that old age, in any moderate egree of health and efficiency, is the finest and most improved ate of the human mind; and is in the most favourable cir-umstances for self-improvement; and if it be intellectually nd morally employed, as in every class it may be, it will en be the happiest and most meliorated condition which uman nature can experience in its present localization.

To society old age is also intended by its Maker to be a enefiting spectacle, even in its most inactive existence. he aged present to the world at large an order of human eings, who, as such, are placed, as it were, in the position of n isthmus between earth and Heaven, connecting and con-ected with both; belonging to both, and leading and point-ng from the temporary to the everlasting—from the seen to e unseen—from that which has been to that which is to be. he hoary head of age, its peculiar countenance, its manifest hange of features, its feebler step, its decaying strength, its equent infirmities, present, in their contrast with all that is ounger, to the continual view and notice of society, an altered eing—a living transition from existing things to some other ondition and abode. If not in that stage ourselves, we can-

not look at it without feeling it to be in this state of passage. It carries our thoughts involuntarily to the region of the departed. It silently reminds its companions both of death and immortality; of death, as a picture of natural decline towards it; of immortality, by presenting to us, in its intellectual and social animation, a principle of vivacious life that seems beyond the power of bodily dissolution to destroy. The older it becomes the more it awakens these ideas; and thus our living world, by the very principles and laws of its natural constitution, is always setting both death and futurity before us; the beginning and the end, and the ulterior state and sequence of human life. In this panorama, age and longevity act like the heralds of time, to warn us of that eternity which they are so closely and so visibly approaching, that we expect every day to find that they have disappeared into it. The moral effects of such remembrancers are small and gradual, but, being continuous and universal, produce important benefit to society in their extensive and collective amount. Human good is made up, in every individual composition of it, of innumerable small particles, successively, and often imperceptibly accruing.

But the direct and positive benefits of old age to society, while it can efficiently serve it, are as incalculable as they are obvious. It diffuses all those advantages which superior knowledge, experience, judgment, and practised wisdom can confer and are always imparting. Literature, science, polity, legislation, magistracy, all national cabinets, and most of the active departments of life, attest the continual contributions of the aged to the right course, and progression, and well-being of their contemporaries and of posterity. No community could long prosper without their services and influence.

Every individual in this stage of life may also, in his little circle, become a benefactor and a model to it. He may always be doing some good by his examples, his counsels, or his judicious and kind assistances. Age thus employing itself, as the opportunities arise, may obtain a personal esteem and regard that were not its property before. The heart and reason will unite to affix to it a distinction and a veneration peculiarly its own. Such a result, while it will make its longevity valuable and desired, will also sooth the possessor of it with one of the most pleasing cordials that life can fur-

e approbation of those with whom it has its daily in-
e.
s been a subject of inquiry, whether longer life ac-
tener to the married or to the single members of
The Prussian gentleman who has investigated the
nsiders it as certain, that, in both sexes, marriage con-
to longevity.*

LETTER XXIII.

*igevity one part of the Plan, and one of the Laws of Human
Its Existence in Antiquity, and in all Periods of the World
our own Times.—The most remarkable Instances of it in the
t Centuries.*

DEAR SYDNEY,

ables of both our living and dying world show us that
en a further part of the Divine plan of human life that
ould be, among its various populations, some indi-
who should enjoy such a prolongation of their human
o reach the age of one hundred years; and that a
portion should last several years beyond this date.
dividuals are found not only in almost every other

asper, in a paper published at Berlin in 1836, remarks, that
Deparcieux, and others have asserted that bachelors are less
than married men. Odier first made the inquiry with any ex-
He found, "Bibl Dict.," 1814, that in females the mean duration
the married women of twenty-five was above thirty-six years,
e unmarried only thirty and a half. At thirty there was a dif-
four years in favour of the married, and at thirty-five an ad-
f two years.
nen, he inferred from Deparcieux and the Amsterdam tables
mortality of those from thirty to forty-five was twenty-seven
for the unmarried, and only eighteen for the married; also,
arried men attained the age of forty to 41 bachelors. The dif-
comes more striking as age advances; for at the age of sixty
e only 22 unmarried alive to 48 who were married. At sev-
e were the proportion of 11 bachelors to 27 married men, and
3 only to 9. Nearly the same results were exhibited in the
s; 72 married women were forty-five, while only 52 unmarried
ed it.—New Monthly Mag., 1836, p. 250. Hence Dr. Casper
he point to be incontestably settled, that in both sexes marriage
to the lengthening *of the* individual life.

country, but likewise in all eras, and even in the most opposite states of society; in the uncivilized as well as in civilized. These circumstances concur to indicate that this extraordinary longevity has been an appointed contingency of human nature; contingent as to the persons who should enjoy and exhibit it, but certain and fixed as to the occurrence of the phenomenon, in those proportions and degrees in which it has been found to take place. Like all the results of the laws of our life and death, both the extension of the duration, and the ratio of those who have it as to the rest of their community, vary in different times and places; but always within limits that are never overpassed. Their numbers are always few, but their appearance forms a constant portion of most societies. It is, therefore, a law of human life, that it should be thus prolonged in this section of its living world. Such a law must have been specially designed, and, like all our specific laws and their results, must have some process of means attached to it from which its effects originate and by which it acts. Some special purposes must be also accompanying its operation, for which it has been instituted. All these points are worthy of our consideration. Indeed, there is no living individual to whom they can be uninteresting; for since the contingence is certain, as an established law of nature, to occur to some, and as the possibility is attached to the principle of life in one as well as in another, every one is susceptible of the benefit, and no one can beforehand know that he will not be the subject of it. It is one of the grand prizes of human existence in this world, sure to fall into the possession of some one; and therefore reason suggests to all to inquire whether any skill or care can increase to individuals the chance of acquiring it, and of making it, if it should arrive, as comfortable a period as any other portion of his present existence. As it will be always a gift of the Divine goodness to those who enjoy it, and, like all his bounties, is meant to be a blessing, my own impression is that it may be made a happy epocha of an earthly life. This is more within our power than its attainment; for though much may be done by enlightened judgment and self-regulating care to favour its occurrence, still it must always depend on his will who ordains it, to whom the benefaction shall be applied. Yet, as longevity has been thus made an appertenance to human nature, *the pro*bability will always be, that, by a due use of the means

which are within our power to apply, it may be acquired and enjoyed by a greater number than have hitherto experienced it.

That this extreme longevity has been in the world in all ages, we see by the great ages of the first ancestors of the Jewish nation,* and by those of the chief heads of their tribes.† Several instances occurred in ancient times of persons living beyond a century.‡ To what is not improbable in this respect, some of the Greek historians added other accounts, which, in their literal statement, must be deemed incredible fictions.§ Modern writers have imitated their extravagance.‖

* Abraham died at one hundred and seventy-five, Gen., c. xxv., v. 7; his wife Sarah at one hundred and twenty-seven, c. xxiii., v. 1; his son Isaac at one hundred and eighty, c. xxxv., v. 28; his other son Ishmael at one hundred and thirty-seven, c. xxv., v. 17; his grandson Jacob at one hundred and forty-seven, c. xlvii., v. 28. Joseph lived to one hundred and ten, c. l., v. 26; Moses to one hundred and twenty, Deut., c. xxxiv., v. 7; and Joshua to one hundred and ten, Judges, c. ii., v. 8.

† Reuben, one hundred and twenty-four; Judah, one hundred and nineteen; Issachar, one hundred and twenty-two; Asher, one hundred and twenty-six; Simeon, one hundred and twenty; Dan, one hundred and twenty-four; Zebulon, one hundred and fourteen; Levi, one hundred and thirty-seven; Naphtali, one hundred and thirty; Joseph, one hundred and ten; Gad, one hundred and twenty-five.—Whitehurst's Inq., p. 170.

‡ Pliny has enumerated some instances of longevity: M. V. Corvinus attained one hundred years, having been twenty-one times in the consular chair. The Pontifex Metellus was as old; Gorgias, a Sicilian, was one hundred and eight. One at Bologna was one hundred and fifty. Some remarks of the female world, that Cicero's Terentia reached one hundred and three, and Allodia one hundred and fifteen. Another appeared on the public stage, in the votive games for Augustus, at one hundred and four. Anacreon ascribed one hundred and fifty to a king of the Tartessi, and Theopompus one hundred and fifty-seven to the Cretan Epimenides.—Plin. Nat. Hist., b. 7, c. 49.

§ Thus, Hellanicus stated that one family among the Etolians lived to five hundred years. Damastes added that one among them reached even three hundred years. Ephorus gravely attributed three hundred years to the Arcadian kings; and Alexander Cornelius believed a person in Illyria to be five hundred years old. Even Xenophon is cited as giving to a king of Tyre six hundred years, and as completing the wonder by representing his son to have been eight hundred years old. But Pliny reasonably suggests that the apparent extravagance of the accounts may arise from the different modes of computing the year. The Arcadian years were only of three months' duration, and others, like the Egyptians', were lunar instead of solar.—Pliny, ib. So Strabo reports the Seres to live above two hundred years, and Ctesias ascribed two hundred to the Indians.—B. 15, p. 27, 8.

‖ Maffeus, in his "History of the Indies," mentions a native of Bengal to have died in the year 1566, aged three hundred and seventy; and Dr.

The most remarkable facts in antiquity on this subject that seem to rest on respectable authority, appear in the persons of this description stated to have been living in Italy in the time of Vespasian. But, though taken from a public document, the number is so great for one portion only of Italy, that I cannot avoid doubting the accuracy of the account as to its numerical quantity.*

Three instances of men, of as many different countries, who were contemporaries in the fifth century, show that the laws of such longevity were in continuing operation. These were, St. Patrick of Ireland; Llywarch Hen, the Welsh Bard; and Attila, the formidable king of the Huns.†

England and Ireland were distinguished by several examples of this kind in the seventeenth century.‡ Of these, two

Burnett says of the Bermudas: "One may reasonably suppose that the natives would live two hundred years."—Theory, vol. i., p. 275, 6.

* Lord Bacon thus states it, from his ancient authority: The year of our Lord 76, the reign of Vespasian, is memorable, for in that year was a taxing. Now taxing is the most authentic method for knowing the age of men. In that part of Italy lying between the Apennine mountains and the river Po there were found 124 persons that either equalled or exceeded a hundred years of age, namely—

54	100	years each
57	110	"
2	125	"
4	130	"
4	135	or 137
3	140	

Besides the above, Parma contained five, whereof three were one hundred and twenty years, and two one hundred and thirty; one in Placentia one hundred and thirty-one; one in Faventia one hundred and thirty-two; one in Rimino of one hundred and fifty, whose name was Marcus Aponius, and others.—Lord Bacon's Hist. Life and Death.

† St. Patrick was one hundred and twenty-two; Llywarch Hen, whose "Welsh Poems" are still existing, was one hundred and fifty; Attila died the day after his second nuptials, at one hundred and four. Some passages from Llywarch's "Poems" are quoted in the "Hist. Angl. Saxons," vol. i., and in the "Vindication of the Ancient Welsh Bards." Mr. Owen Pugh published them, with a translation.

‡ The Countess of Desmond died in 1612, aged one hundred and forty-five; on the ruin of her family she was obliged, at the age of one hundred and forty, to travel from Bristol to London, to solicit relief from James. Mrs. Eckleston, of Philip's Town, King's County, Ireland, died in 1691, aged one hundred and forty-three. In 1671, Robert Montgomery, born in Scotland, died at Skipton in Craven at one hundred and twenty-seven; and Gustavus Holme, a Dover pilot, was buried in 1685, at Stoke, near Canterbury, in his one hundred and thirty-second year. Thomas Damne was buried in 1648, aged one hundred and fifty-four; on *his gravestone* at Leighton, near Minshal, in Cheshire, his age is cut in

have been long considered as the patriarchs of English longevity.* The celebrated Haller had collected 1111 instances of persons who lived from one hundred to one hundred and sixty-nine.† An English bookseller made a still more copious enumeration, and his list contains notices of 1687 persons who died in the course of the last century, of various ages from one hundred to one hundred and eighty-five. Of these above 1600 were natives of the British Islands.‡

words at length, and the church register of his burial and age is signed by the vicar and churchwardens.—Eaton's Human Longevity, p. 5–12.

* These were, Thomas Parr, of Winnington, in Shropshire, who died in 1635, aged one hundred and fifty-two; he was a poor countryman, who married his first wife in his eighty-eighth year, and had two children, who died young. Taken by the Earl of Arundel to be presented to Charles I., and retained as a part of his household, his high feeding there after his former homely diet soon brought on death. Dr. Harvey found his internal functions so sound, that he would have probably lived much longer if he had adhered to his usual habits. His son attained one hundred and thirteen; his grandson one hundred and nine; his great grandson one hundred and twenty-four; two other grandsons, who died in Ireland 1761 and 1763, were one hundred and twenty-seven.

Henry Jenkins, of Yorkshire, had a still longer life; he died at one hundred and sixty-nine years in 1670. He had taken, in 1513, at the age of twelve, a cart load of arrows to Northallerton for the army which advanced and fought the battle of Flodden Field in that year. His deposition in a cause in the Exchequer, preserved in the King's Remembrancer's Office, taken in April, 1665, describes him as a labourer then aged one hundred and fifty-seven years. Both these are noticed in the early part of the "Philos. Transactions."

† Haller thus classes them—

1000	. .	from 100	. .	to 110	years
60	. .	" 110	. .	to 120	"
29	. .	" 120	. .	to 130	"
15	. .	" 130	. .	to 140	"
6	. .	" 140	. .	to 150	"
1	. .	of 169			

‡ This was Mr. Easton, of Salisbury. All the names in his "Human Longevity" were 1712; of these, 10 were before 1600, and 15 between 1600 and 1700. The remaining 1687 persons died between 1706 and 1799, which may be thus classed—

3	. .	from 170	. .	to 185	years
1	. .	" 160	. .	to 170	"
5	. .	" 140	. .	to 150	"
24	. .	" 130	. .	to 140	"
80	. .	" 120	. .	to 130	"
275	. .	" 110	. .	to 120	"
1299	. .	" 100	. .	to 110	"

Mr. Whitehurst's brief table contains some instances of great age not in Mr. Easton's collection, as—

Mr. Lawrence, Scotland, one hundred and forty; Simon Jack, of Tricnia, one hundred and forty-one, died 30th May, 1764; Dr. William Mead,

The extremely aged of those mentioned in the last century were Hungarians, and the statements therefore, from the distance of their locality, can be less relied on.* The oldest of this period in England was a poor Yorkshireman, who in 1768 reached his one hundred and fiftieth year.† An Irish officer of the army died in 1765 at one hundred and forty-six;‡ and, about the same time, an English farmer at one hundred and thirty-nine.§ In 1732 another Irishman reached one hundred and forty;‖ and an English lady, in 1772, died at one hundred and thirty-eight, leaving a family advancing towards her own longevity.¶ Another had, in the same year, attained one hundred and thirty-three; had also children of the same surviving tendency.** These long lives appeared in all the three

one hundred and forty-eight, Ware, died 28th Oct., 1656; Martha Waterhouse, one hundred and forty, Biesley, Yorkshire; Dumiter Radaly, one hundred and forty, Harminstead, died 16th Jan., 1782; William Evans, one hundred and forty-five, Carnarvon, living in 1782; James Bowels, one hundred and fifty-two, Killingworth, died 15th Aug., 1656; John Brookey, one hundred and thirty-four, Devon, living 1777; and some others.

* These were, 1724, Peter Torton, of Temeswar, in Hungary, one hundred and eighty-five, a peasant.—Easton, p. 14. Of the same Bannat, in 1741, John Rovin, one hundred and seventy-two, and his wife, one hundred and sixty-four; both died in the same year, the one hundred and forty-eighth of their marriage, leaving two sons and two daughters. Their youngest son was one hundred and sixteen years of age.—Ib., 23. In 1797, Jonas Surington, aged one hundred and fifty-nine, resided near Berger, in Norway.—Ib., 275.

† "Francis Consit, of Burythorpe, near Malton, in Yorkshire. He was very temperate in his living, occasionally eating a raw new-laid egg, and used great exercise. For the last sixty years he was maintained by his parish, and retained his senses to the last."—Ib., p. 104.

‡ "Thomas Winslow, Esq., of Tipperary, in Ireland. He was a colonel in the army. He held the rank of a captain in the reign of Charles I., and accompanied Oliver Cromwell into Ireland."—Ib., 87.

§ "Mr. Dobson, of Hatfield. By much exercise and temperate living he preserved his health; ninety-one children and grandchildren attended his funeral."—Ib., 87.

‖ "William Leland, of Lisneskie, in Ireland. Though he lived to such a great age, he was never sick, nor lost the use of any of his faculties till the hour of his death."—Ib., 16.

¶ "Mrs. Chum, near Litchfield, Staffordshire. She resided in the same house one hundred and three years. By frequent exercise and temperate living she attained her great longevity. She left one son and two daughters; the *youngest* upward of one hundred years."—Ib., 133.

** "Mrs. Keithe, of Newnham, Gloucestershire. She lived moderately, and retained her senses till within fourteen days of her death. She left *three daughters*; the eldest aged one hundred and eleven; the second *one hundred* and ten; the youngest one hundred and nine."—Ib., p. 131.

branches of our population. England exhibited the ladies just mentioned, and others.* Two of its male sex, in 1767 and 1780, were of the ages one hundred and thirty-four and one hundred and thirty-nine. The first was remarkable for having a son in his own and in his wife's old age.† The other evinced that the air and habits of a great metropolis do not make such longevity impossible.‡

Scotland contained in 1776 and in 1793 two individuals of the several ages of one hundred and thirty-six and one hundred and thirty-seven; the latter distinguished by a monument from his last noble patron for his moral worth and services.§ Ireland, in both its sexes, exhibited also instances of their great tenacity of life. Three of its females reached one hundred and thirty-three, one hundred and thirty-five, and one hundred and thirty-six.‖ The husband of the latter nearly equalled her, being one hundred and twenty-eight. Another old Irishman was one hundred and thirty-six, a farmer.¶

One English gentleman, who attained one hundred and

* As, in 1769, Mrs. Margaret Foster died at one hundred and thirty-seven, near Brampton, in Cumberland. Her daughter had departed a short time before, aged one hundred and five.—Easton, 115.

† Francis Ange, born at Stratford-upon-Avon, but died at Maryland, in America, aged one hundred and thirty-four. He remembered the death of King Charles I., and left England soon after. His wife at eighty had a son, who was thirty-one years at his father's decease (ib., 99), consequently was born in his one hundred and third year.

‡ In 1780, "Mr. Evans, aged one hundred and thirty-nine, of Spital-street, Spitalfields, London. He had all his senses to the last; he was seven years old when King Charles was beheaded."—Ib., 168.

§ The first was "Mr. Moval, a surgeon at Langholm, in Dumfries-shire," p. 151; the other was "Mr. Robertson, of Edinburgh. He had served a noble family there as inspector of the lead-works for four complete generations. His last lord raised a monument, with an inscription, to his memory, as having discharged his duties with zeal and fidelity for one hundred and twenty years."—Ib., 253.

In 1775 died Peter Garden, of Aucherness, near Edinburgh, aged one hundred and thirty-one. He remembered very well having been employed in the woods to cut handles for spears in the civil wars."—Ib., 149.

‖ In 1761, "Elizabeth Marchant, aged one hundred and thirty-three, of Hamilton's Bawn, in Ireland."—Ib., p. 62. In 1796, "Mrs. Thompson, near Dublin, one hundred and thirty-five. She was very active, and by a regular mode of living, together with much exercise, attained so great an age."—Ib., 273. In 1769 died "Catharine Noon, otherwise Moony, at one hundred and thirty-six, near Tuam, in Ireland. She was very temperate at her meals."—Ib., 106.

¶ In 1759, "James Sheile, of Bally Paden, in the county of Kilkenny."—Ib., 52.

thirty-eight years in 1791, is interesting to us for his pecuniary accommodation and intended kindness to our illustrious Milton. I will give the statement as I find it printed—

"1791. Died, Jonathan Hartop, aged one hundred and thirty-eight, of the village of Aldborough, near Boroughbridge, Yorkshire.

"His father and mother died of the plague, in their house in the Minories, in 1666, and he perfectly well remembered the great fire of London. He was short in stature, and had been married five times. He left seven children, twenty-six grandchildren, seventy-four great grandchildren, and one hundred and forty great great grandchildren.

"He could read to the last without spectacles, and play at cribbage with the most perfect recollection. On Christmas day, 1789, when one hundred and thirty-six, he walked nine miles to dine with one of his great grandchildren. He remembered King Charles II., and once travelled from London to York with the facetious Killigrew.

"He ate but little, and his only beverage was milk. He enjoyed an uninterrupted flow of spirits. His third wife was an illegitimate daughter of Oliver Cromwell, who gave with her a portion amounting to about five hundred pounds. He possessed a fine portrait of the usurper, for which Mr. Hollis offered him three hundred pounds, but was refused.

"Mr. Hartop lent the great Milton fifty pounds soon after the Restoration, which the bard returned him with honour, though not without much difficulty, as his circumstances were very low. Mr. Hartop would have declined receiving it, but the pride of the poet was equal to his genius, and he sent the money with an angry letter, which was found among the curious possessions of that venerable old man."*

The military profession, notwithstanding its frequent privations, fatigues, exposures, hardships, and sufferings, especially on active service, yet has comprised individuals who have reached the extreme periods of human longevity. In 1757, one of Oliver Cromwell's soldiers died at one hundred and thirty-two years old.† In 1749, a dragoon was one hundred and twenty-five at his death.‡ A French soldier, who had served under Louis XIV. at Malplaquet, and travelled extensively afterward, reached one hundred and twenty.§ And the last surviver of the Duke of Marlborough's English army, who lived until 1793, was one hundred and fourteen when he ex-

* Easton's Human Longevity, p. 241, 2.

† Alex. M'Cullock, near Aberdeen. After Cromwell, he served in the army during the three following reigns.—Ib., 46.

‡ Alex. Bennet, of Down, in Ireland. He was a dragoon at the battle of Boddle under Charles. II.—Ib., 30. Another soldier, who had served under the reigns of George I. and George II., died in 1794, a pensioner of Chelsea Hospital, at one hundred and twenty-three.—Ib., 259.

§ The Sieur de la Haye died in 1774. He was at the taking of Utrecht in 1672, and at the battle of Malplaquet in 1709. He had travelled by land to Egypt, Persia, the Indies, and China. At the age of seventy he married and had five children."—Ib., 145.

pired.* Two soldiers of the civil wars died at one hundred and twelve in 1733.†

I will select another instance for your consideration, as it presents a remarkable instance of one of the great pleasures and benefits attending longevity—that of beholding the improvements which, during a single life, a prospering nation enlarges into. He was an American, who saw the site on which Philadelphia stands before this city was founded, and its wealth and magnitude to which it had grown before he died. As the knowledge of such a person may have suggested to Mr. Burke that simile of the angel and Lord Bathurst, in one of his speeches on America, which equals the finest effusions of ancient oratory, I will cite here the whole account that was attached to the notice of his death.

"EDWARD DRINKER, of Philadelphia, aged one hundred and three. He lived on very solid food, drank tea in the afternoon, but ate no supper.

"He was an amiable character, uniformly cheerful and kind to everybody. His religious principles were as steady as his morals were pure. He was four times married, and had 18 children, all by his first wife. He lost his teeth thirty years before he died, by drawing [qu. chewing] extremely hot tobacco.

"The life of this man was marked with several circumstances which have seldom occurred in the life of an individual.

"He saw the same spot of earth covered with wood, and a receptacle for beasts and birds of prey, afterward become the seat of a city, not only the first in wealth and arts in the New, but rivalling in both many

* William Billings, aged one hundred and fourteen, of Fairfieldhead, near Longnor, Staffordshire. "He had lived to this age free from sickness, and expired without a groan. He was the only surviving private in England who had served under the great Duke of Marlborough. He was born under a hedge, in the year 1679, not a hundred yards from the cottage where he died."—Easton, p. 257.

† Mr. Truss, of Clay Hill, near Enfield, Middlesex, was a soldier in the army of Oliver Cromwell, and William Haseling had served in the parliament army at the battle of Edgehill; afterward under King William in Ireland, and Marlborough in Flanders. Both were one hundred and twelve.—Ib., 16, 17.

John Couse died in 1752, aged one hundred and twelve. He was born in France, and served three campaigns in Flanders under Louis XIV., then entered into the Dutch service, came to Ireland under Duke Schomberg, enlisted under King William, and distinguished himself in most of the battles. On leaving the army he took a farm.—Ib., 37.

Very few aged sailors occur. In 1753, a Dutchman who had been in all the expeditions of Admiral Ruyter died at one hundred and four, at Rotterdam.—Ib., 39. In 1769, a ship-carpenter was one hundred and five, who was at work in the yard when the Czar Peter came to learn shipbuilding.—Ib., 116. In 1780, William Ellis died, one hundred and thirty-one, of Liverpool, shoemaker. He had been a seaman in the reign of Queen Anne, and a soldier in that of George I.—Ib., 166.

of the first cities in the Old World. He saw regular streets where he once pursued a hare; churches rising upon morasses where he had often heard the croaking of frogs; wharves and warehouses where he had seen Indian savages draw fish from the river for daily subsistence; ships of every size and use in those streams where he had often seen nothing but Indian canoes; a stately edifice, filled with legislators, astonishing the world with their wisdom and virtue, on the same spot, probably, where he had beheld an Indian council fire.

"He saw the first treaty ratified between the newly-confederated powers of America and the ancient monarchy of France, with all the formality of parchment and seals, where he had seen William Penn ratify his first and last treaty with the Indians without the formalities of pen, ink, or paper. He beheld all the intermediate stages through which a people pass, from the lowest to the highest degree of civilization—the *beginning* and *end* of the empire of Great Britain in Pennsylvania. He had been the subject of crowned heads, and afterward died a citizen of the newly-created republic of America. He embraced the liberties and independence of America, and triumphed, in the last years of his life, in the salvation of his country."*

It has been remarked, that most of the persons distinguished for great longevity were short in stature; but one is mentioned who was unusually tall.† It has even accompanied deformity;‡ and, what must be still more unusual, uncommon fatness.§ Even watery marshes, which in Ely and Essex have been found so unfavourable to the continuance of human life, yet have not prevented the term of a century from being exceeded.‖ The negro constitution is also susceptible of lon-

* Easton, p. 184. This sketch has in it so much of Mr. Burke's manner, both of style and thought at that time, that, if it be in the "Annual Register" of 1782 or 1783, I should be induced to think he was the author of it. As he was for some years the political agent of the leading men of America when they began their resistance, he may have been in correspondence with Mr. Drinker.

Philadelphia, in 1761, had a couple several years older; but as they died that year, they did not live to see either the revolt or the independence; they were, "Charles Cotteral, one hundred and twenty; his wife, one hundred and fifteen. This couple lived together in the marriage state ninety-eight years in great union and harmony, and died within four days of each other."—Ib., 56.

† In 1769, "Peter Breman, aged one hundred and four, of Dyer-street, St. Giles, was six feet six inches high. He had been a soldier from the age of eighteen."—Ib., 114.

‡ Mary Jones, of Wem, in Shropshire, in 1773, was one hundred. She was very deformed, and only two feet eight inches in height.—Ib., 141.

§ In 1786, Charles Blezard, of Newnham, near Oxford Farm, died at one hundred and seven. He was one of the most corpulent men in the county.—Ib., 205.

‖ In 1796, Susan Mills died, aged one hundred and two. She resided *in the Ship-meadow* Lockhouse, on the Bungay navigation. Her hus-

gevity, rivalling in duration the whites.* Gipsy life, as before mentioned, with all its exposures and frequent misery, equally admits of it, and even amid its infirmities.†

The persons of other nations besides our own, who have been mentioned for their longevity, show that no regions of the world or state of society are incompatible with it. The South American Indians, the Caraccas, Brazil, Egypt, Tyrol, Turkey, Norway, Spain, Denmark, and Poland, furnish instances of it, which indicate that its causes reside not in soil, or atmosphere, or manners, but in the individual frame, and in the personal application of the blessing by Him from whom all life has originated, and by whom it is constantly regulated in every member of human societies. We may therefore conclude that this great longevity is one of the established laws of human life, although limited as yet to a ratio of indi-

band was manager on the locks. Her residence was mostly surrounded by floods throughout the winter.—Easton, p. 268.

* At Kingston, in Jamaica, in 1796, Samuel Pinnock, a negro man, at one hundred and twenty-five. Till within the last two years his faculties were perfectly sound and his memory remarkably retentive. He had a perfect recollection of the earthquake which, in 1692, nearly destroyed Port Royal. He was on board a ship lying near Fort Augusta when it took place, and has frequently related the catastrophe with a minuteness of detail which no one but an eyewitness could have given. —Ib., 276. In 1798, Elizabeth Brown, a negro woman, died at Port Royal at one hundred and twenty-four years old.—Ib., 286. And another in Spanish Town of one hundred and six; another of St. Jago de la Vega, a free negro woman, aged one hundred and twenty-one.—Ib., 287.

† Thus, in 1740, died Margaret Finch, at one hundred and nine. "She was one of the wandering fraternity of gipsies, of whom she was called queen. Her manner of life was the same as is usual with those people. Towards its close she took up her residence at Norwood."—Ib., 23. In 1799 Anne Day died at one hundred and eight. "She was a well-known gipsy. Being almost double, she travelled the country on an ass, attended by two or three of her fraternity, and was well known in most parts. She had not slept in a bed for seventy years; and for the last forty years had not a tooth in her head; nor sight, but in one eye; about twelve years before, she lost three of her toes by the frost and the use of one of her arms. She died under a hedge near Henlow, in Bedfordshire, and was buried at Arsley. The two of her people who attended her funeral called themselves her son and daughter: he was eighty two, and she eighty-five. They had each great grandchildren.—Ib., 288.

Another instance of gipsy longevity has just occurred. "Andrew Boswell, the King of the Gipsies, died on Monday afternoon, 30th of January, 1837, at the advanced age of ninety-nine. He was possessed of an ass nearly as old as himself, a camp, and a fiddle, and left one grandson, and twelve sons and daughters. His remains were interred by the tribe, with all the due honours, in Laneham churchyard.—Nottingham Journal, Feb., 1837.

vidual enjoyment of it, which is sufficient to excite the desire of attaining it, and to testify to us its possibility, but which has not hitherto been made a general acquisition.*

* From Mr. Easton's collection from the obituaries he met with, I select the following instances of foreigners of great longevity :—

"1788. Jean Cayaton, aged one hundred and thirty, an Indian of Tesentla, in New Spain, p. 221.

"1782. Captain Cespedes, of the Caraccas, one hundred and ten years. He belonged to the militia of Pardo, and was esteemed a prodigy for that climate, p. 225.

"1775. Andrew Vidal, of Siara, in Brazil, one hundred and twenty-four. He had thirty sons and five daughters. In 1773 he lived in the same house with his children and grandchildren, of whom the number amounted to 149, p. 150.

"1772. Died, aged one hundred and twenty-eight, Abraham Shodman, at Rouen. He was a native of Alexandria, in Egypt, p. 130.

"1778. Jean Aragus, at one hundred and twenty-three, of Lastrea, in Turkey, a caravan driver, p. 158.

"1765. Edgiebert Hoff, at one hundred and twenty-eight, of Fish Hill, New-York. He was born in Norway, and could remember that he was a lad driving a team there when the news was brought that King Charles I. was beheaded. He had served as a soldier under the Prince of Orange, in the time of James II., p. 85.

"1743. Peter Mestanca, of the village of Veniel, in the kingdom of Murcia, at one hundred and thirty. He was a bachelor, never tasted wine, worked hard, and bathed every morning in the river Segura, from the beginning of spring until it froze again. His teeth were sound, and he was never attacked by any acute distemper, p. 26.

"1771. Christia Jacobsen Drackenberg, one hundred and forty-six, of Aarhus, in Denmark, a celebrated and well-known character, p. 122.

"1786. M. Oztroki, of Zodorsky, in Poland, one hundred and twenty-five. He attended as page on John Sobieski when he relieved Vienna, besieged by the Turks in 1683," p. 208.

To these I will add—"1790. John Lovah, the celebrated patriarch of Mount Jura, aged one hundred and twenty-eight. He was sent, in 1789, as a deputy to the National Assembly at Paris, to return thanks, in the name of his countrymen, for the abolition of the feudal system. At one hundred and twenty-seven he was led into the hall by his daughter, and seated opposite the president. On his entrance, all the members rose up in respect to his old age, and received him standing, and desired him to sit covered. A subscription was immediately made for his support, and the king granted him a pension. He was buried the next year in his district with a public solemnity," p. 236.

LETTER XXIV.

Longevity made a Natural Property of Human Nature.—At present increasing in frequency.—Not attended naturally with Decay of Faculties.—Instances of its Efficiency.—Distinguished Men among the Ancients who were Aged.

My dear Son,

We are entitled, by the preceding facts, to believe that longevity is one of the natural qualities of the human body, in its material composition, during that association of our mind with it which constitutes our human life. The mind itself being indestructible by our present death, would subsist for a thousand years, or for an endless succession of time, if its bodily organizations had been framed to last so long. Not merely longevity, but perpetuity of existence, is one of the essential properties of the human soul. No power but its Maker's, and no act but the exertion of his omnipotence, can extinguish that. But the residence which has been assigned to it on this globe is meant to be only for a time; and its body has been so formed as to be either a long or brief companion to it. The union of the soul with it here is of the same temporary character. The chronology of this union, and of the duration of the bodily compound, is therefore concurrent, and begins and ends with both at the same periods. Birth commences and death terminates it. But the soul is no servant of time; to this its origin appertained; but, once brought into being, it belongs to time no longer. It was created to be a member and an inheritor of eternity; and, with this relation, it lives through its journey here, and afterward passes elsewhere, with the same inalienable, undying property. Hence any extent of longevity in this world is but a dramatic section of its everlasting history and activity. We are all actors here, in our present human figures, during the scenes through which we pass; but, like all those who personate the parts allotted to them in our tragedies or comedies, we leave the stage and audience before whom we have been appearing for other employments, for another home, and for a different kind of happiness, or the contrary, in some other place of its

abode, as may be allotted to us. Our longevity, ther here, is a question only of our bodily incorporation and e residence, not of the existence of our intellectual pri itself; that still lives in undiminished vitality, althoug body had dissolved and evaporated into the million par of which it was compounded.*

But, although endless longevity is the created proper the soul, and its duration on earth between one and two turies is a natural possibility to its bodily frame and union with this, yet, like some other properties and pos ties of our human life and corporeal composition, it i rarely brought into operation during our present existenc is neither made nor meant to be, at present, a general law, ever it may be intended to become in some series of ou terity. We have several bodily properties which do but par evolve and show themselves. Gigantic stature is one of possibilities. We read of giants in Scripture: I have two myself,† and some are mentioned by Dr. Adam C with whom he was acquainted.‡ They occur at all time casionally among us;§ but it is not the will of Providenc they should be frequent, and therefore the powers and tions of the body which lead to procerity are so represse governed by other instrumentalities, that the larger qua of mankind are only of the middle size; a proportion onl

* You may like to read the celebrated Dr. Franklin's feeling as body and soul. In 1756 he wrote, on the death of his father, to a —"We have lost a most dear and valuable relation; but it is th of God and nature that these mortal bodies be laid aside when the to enter into real life. This is rather an embryo state—a preparati living. A man is not completely born until he is dead. Why, should we grieve that a new child is born among the immortals—a member added to their happy society! WE ARE SPIRITS. That should be lent us while they can afford us pleasure, assist us in ring knowledge, or in doing good to our fellow-creatures, is a kin benevolent act of God. When they become unfit for these purpo is equally kind that a way is provided by which we may get rid of Death is that way."—Dr. Franklin's Private Works, vol. ii., p. 4.

† One was between seven and eight feet, the other between eigh nine.

‡ Dr. Adam Clarke, in his life of himself, states that he knew two ers named Knight, near his father's house in Ireland, of great str and each seven and a half feet high; and also one, Charles Burns measured eight feet six inches, and was well proportioned.

§ Thus, the following notice was in the "Glamorgan Gazette" o 1, 1836—"A native of the village of La Reid, in Belgium, who was major in the army of the Netherlands in 1828, is now at Parma, an *grown to* the height of eight feet four inches."

tall, and the gigantic stature in others is not in a greater ratio than the great longevity of the human frame which we are now contemplating.

Bodily strength is also another quality which some persons have possessed in an extraordinary degree, and which is therefore always a possibility in human nature on earth.* But this has been also imparted with such rarity, that it is not more common than the usual proportions above mentioned.† Of the same description is the maternal power of reproduction. This can occur in a degree so large as to seem preternatural. But it is not more so than great longevity, gigantic magnitude, and extraordinary strength. It is only a demonstration that the latent natural possibility exists, but is always so governed as to be, in its general course, kept in the habitual tenour of a single birth, with twins at times, in no large proportion.‡ Plutarch thought he had mentioned the largest

* Two of the family of Adam, who, on Christian's mutiny, had settled in Pitcairn's Island, acquired there such muscular power, that each carried at one time, without inconvenience, a kedge anchor, two sledge hammers, and an armorer's anvil, amounting to above six hundred weight. One of them carried a boat twenty-eight feet long.—Beechey's Voy., vol. i., p. 125. At the ironworks at Merthyr Tydvil, a young man in June, 1832, raised up from the ground at once three pieces of iron weighing five hundred and forty pounds.—Mouth. Merlin, June, 1832. On 13th August, 1832, John Williams, a waterman of Waterloo bridge, rowed for a wager thence to Gravesend and back, up to Richmond and returned, being ninety-six miles, in eleven hours and a half.—Public Papers, 14th of August, 1832. The Rev. J. M'Lean, one of Dr. Clarke's uncles, could bend iron bars with a stroke of his arm, and roll up pewter dishes like a scroll with his fingers.—Dr. Adam Clarke's Life.

It is a curious fact, mentioned by the diver employed in 1832 at Yarmouth to get up the treasure of the Guernsey, lately sunk there, that "when under water he finds his strenghth so increased that he can bend together the ends of the large iron crowbar, three and a half feet long and two inches and a half in size, which he takes with him."—Public Papers, 14th August, 1832.

† In a French periodical, in July, 1836, was this paragraph—"At Riom les Montagnes, in the Cantal, there is a man aged twenty-nine of Herculean strength. He can raise a burden weighing 2000 lbs., and with the third finger of the right hand can lift up two hundred lbs. He has a brother aged twenty-three, and a sister of twenty-five, of nearly equal strength. They are all very mild in character, and are occupied in farming." In 1789, Philip Wess, a soldier at Antwerp, died aged one hundred and four. He was so strong that, at seventy-three years of age, he lifted a butt of beer into a cart without the least trouble.—Easton, p. 222.

‡ It has been calculated that twins occur at an average about once in every eighty births.

extent of offspring from one parturition when he stated five to be the boundary.* In modern times, however, one instance occurred in which a mother lay-in with eight.† All these facts concur to show that the course and agencies of human life are under a strict and adjusted regulation by the Creator, which constantly modifies the natural power and possibility into that well-graduated operation which suits his appointed scheme of human existence on earth, in its present stages and generations. Longevity is thus governed, allowed, and allotted, and appears only in minor proportions, but with such universality as to place, climate, and person, as to show that it is possible to all, though as yet granted but to very few.

One of the reasons for which these extraordinary operations of the laws and systems of our nature are sometimes allowed to occur, may be, to give thereby an impressive testimony how carefully governed all the functions of our body are, that they may execute with accuracy the plan of our intended life, and carry it on steadily in its appointed course. They show how needed a strong and watchful regulation is of the laws that produce our life and growth, and their results; for, without this constant government and adaptation of them, the preternatural phenomena, from the unruled powers and properties of our body, would be so frequent as to confuse and disorder; and to make that confidence in the regular recurrence and sequences of things impossible on which our foresight, and prudence, and even scientific calculations are founded. Hence, though in our limbs extraordinary additions may occur, if the growing powers of the organized vessels in the hands and feet were unrestrained, they are always so governed, by means of which we are ignorant, that their possibilities of increase are kept in perpetual restriction, and only five fingers and five toes become the universal formation. More than these are but a very rare anomaly; though, from occurring in some instances,

* Plutarch, in the second of his Roman questions, inquiring why they lighted five torches at a wedding, gives as one reason of it that light is a symbol of life, and that a woman may bear at the most five children at one parturition.

† An authenticated case occurred in Lancashire of four at a birth. Dr. Garthshore has added to the account of this, in the "Philosophical Transactions," several examples of numerous births recorded by medical authors. One of them was an instance of eight children born at one lying-in. Of these one grew up to manhood, and was alive when the statement was written of it.—Phil. Trans., 1787, vol. lxxvii., p. 344.

sibility at all times, and the agency which limits it, manifested to our senses.* All these unusual inci- therefore speaking evidence to us that the laws and of life must be daily controlled and governed by the lministration of an intelligent power, acting upon a and well-adjusted plan, by which the operation of v is confined to produce that specific effect which system and intended results of all the rest, and pre- from every other degree or direction of action that casion different consequences to occur.

henever an increase of the action or result of any ature will be beneficial to mankind, and the period hen it is intended that they shall have this advantage, restriction which before prevented the augmented is relaxed, and nature is permitted to exert her prop- d powers to that larger result by which a further ad- will accrue to the human race. I consider longevity of the Divine blessings to man which is at present ng a permitted enlargement of this kind. Human s to have received a fiat, both for its greater duration rity, ever since the present century began. In our ntry it has been perceived that the length of life in asses is increasing, and the extreme periods of its may be expected to partake of the general prolonga- n the natural grounds this would be a rational infer- the improvement is an indication to us that an aug- benefaction in these respects has descended from the n mankind. If the life of this human world has re- increase, it is by him that the benediction has been , as he alone has the power; and all life subsists is will and according to his plan. I do not mean to the longevity of mankind is extending in its duration, multiplying in its individual frequency: and this all so much hope and prospect of partaking of the e, as to encourage those who value it to endeavour, use of serviceable means, to be themselves the pos- f it. For this reason I will take a larger view of the

in 1764, Owen Carollan, of Duleek, in the county of Meath, hundred and twenty-seven years old. He had six fingers on and six toes on each foot.—Easton, p. 79. It has been stated is a family in Austria in which this number of fingers and toes reproduced for several generations.

facts and reasonings which occur on this interesting subje
It was not easy to collect, formerly, a great number of
stances of those who had reached a century or more; t
they have become so numerous in the last fifty years, that,
we have seen, no fewer than 129 were existing contemporari
of each other in England and Wales in 1821, and the larg
number of 508 were in America in 1830. So we find th
they have become so many in our island in the thirteen yea
between 1818 and 1831, that, during this interval, no few
than 1900 individuals died who had reached a century
passed beyond it.*

When we compare these facts with the notices which a
tiquity has left us on this subject, there seems full reason
believe that the longevity of human nature has become mo
frequent and diffused in the present century than it was four
to be in the Greek and Roman times by the inquiring m
of those days. The few facts of this sort known to Pli
were alluded to in the preceding letter; and Lucian, thou
he enumerated in his treatise of the Macrobii or Long-live
apparently all the instances he had found or heard of, a
among these names numerous persons who were eighty
ninety, and a little more, he yet only mentions about a doze
as having reached a hundred years or above.† These ci
cumstances lead me to infer that the longevity which attain
or exceeds a hundred years has not, as far as we can judg
from true and authenticated accounts, at any time been
frequent in the world as it now is in the civilized nations o
Europe and America. But as it could not have thus increase
without the permission and causation of its Divine Autho
we may assume that it is his purpose to diffuse this benef
more extensively to his human race, in the present age of th
world, than he has hitherto imparted it; and that human lif

* They were 637 males and 1263 females; but of these 1900, 16
died before their one hundred and second year, and in the three follow
ing years 572 more expired; so that only 91 males and 172 females,
263 of both, had survived their one hundred and fourth year.

† These were, the King of the Tartessians, who Anacreon, in hi
sixty-eighth ode, says lived to one hundred and fifty, though Herodotu
allows him only one hundred and twenty years; the great Cyrus, e
hundred; a King of Arabia, one hundred and fifteen, as mentioned by
contemporary; a musician, of one hundred and five; Democritus, o
Abdera, one hundred and four; Gorgias the sophist, one hundred an
eight; Ctesibus the historian, one hundred and twenty-four; Hieron
mus, also such a writer, one hundred and four; Solon, and two other
the Seven Sages, one hundred.—Lucian's Macrobii.

will now experience a prolongation in all its stages, if, by a right use of the enlarged blessing, mankind will show that they can receive and enjoy it with gratitude to the Giver, with mutual philanthropy, with personal piety and morality, and with intellectual improvement. For we can hardly err if we suppose these to be conditions requisite on our part, as, without them, increase of longevity might become very noxious to general society. All may not choose to adorn their life and increase their happiness by these virtues, because they will not practise the self-government which these qualities require; but, then, we must remember that lengthened life is always an individual blessing, and each individual can in this point act for himself and independently of others, and may seek it by his individual improvement. Such conduct will be his surest means of obtaining it for himself, without regarding whether any others undervalue it, or will use no forbearance to obtain it.

But unless longevity be a state of comfort to its possessor, it will not be an advantageous gift to him. The important question, if it be extending to a greater number, will always be, whether it be desirable as well as attainable.

It has been a favourite theory with many, that the mind decays with age, and consequently must become feebler as years advance, until it expires with its body, like a wasted taper. But this is an erroneous hypothesis, grounded on a partial view of some facts, which are more justly attributable to disease than to age, and is contradicted by numerous cases, which show, that though age enfeebles the body, it does not necessarily debilitate the mind. There are even instances in which the intellect has increased instead of being lessened as life has been prolonged. Lord Clarendon mentions a nobleman of whom this was remarked;* and several instances, which I have noted as they occurred, satisfy me that extreme longevity has been repeatedly enjoyed without bodily disability. Let us refer to some of those who have lived long without corporeal debilitation.

* This was the Earl of Manchester, Lord Privy Seal to Charles I. Of him Clarendon says, "He was a man of great industry and sagacity in business, which he delighted in exceedingly, and preserved so great a vigour of mind, even to his death, when he was very near eighty years of age, that some who had known him in his younger years did believe him to have much quicker parts in his age than before."—Lord Clar. Hist., vol. i., p. 97.

Thus, one person died at one hundred and five, without any incapacitating debility ;* another, though in the humblest and poorest walk of life, was yet, at the same age, in active efficiency.† At one hundred and two, the same bodily ability appeared in a French woman ;‡ and also, to a considerable degree in Wales, at the age of one hundred and six.§ In another instance the memory had decayed, while the health and strength were continuing, at one hundred and three.‖ Another, who died at one hundred and four, pursued her walking business within four years of her demise ;¶ and one individual at one hundred performed labour, which implied good muscular activity.**

Several other instances also exhibit the full use of the mental faculties in this protracted life. At one hundred and twelve, no loss of mental power was sustained ;†† and at one hundred and nine, an individual in Herefordshire was enjoy-

* "In April, 1836, died at South Shields, Mary M'Kie, aged one hundred and five, retaining her mental and bodily faculties to the last."—Gent. Mag., 1836, p. 443.

† "In Nov., 1834, died at Bungay, aged one hundred and five, Anne Chaulker, matchseller and Christmas carol-singer. She enjoyed excellent health until within two days of her death ; and the day previous to it she lifted and carried half a bushel of coal home from the stack."—Gent. Mag., 1835, p. 109.

‡ "A female, aged one hundred and two, died recently at Bailley, in Riviere. She would, in all probability, have attained a much greater age, but for the accident of falling into the fire, by which she lost her life, since, after she had completed her century, she had sufficient strength and activity to climb over a wall seven feet high to recover a key she had dropped."—Morn. Herald, 2d Dec., 1833.

§ "There is at present residing at Pontymisser, in the parish of Mschen, Monmouthshire, Ann Samuel, of the age of one hundred and six years. She is able to walk with tolerable facility.—Standard, 19th Oct., 1833.

‖ "In the Vale of Carrizell, near Alston, are *now living* an old man and his wife named Martin. Both of them are one hundred and three years. They have lived together nearly eighty years in the married state, and both enjoy good health, and can walk about with ease, but their memory is much impaired. They have reared a large family of men and women."—Carlisle Journal, March, 1834.

¶ "Bath. Died lately at the Temple Gate Almshouse, in her one hundred and fourth year, Sarah Silcox. When in her one hundredth year she sold cakes about the streets."—Gent. Mag, 1834, p. 453.

** "At Willoughby, in Nottinghamshire, Thomas Clarke died last week in the one hundredth year of his age. In July last he mowed twenty acres of thistles. He survived all those who had been living in his parish when he was an apprentice."—Stand., 20th Nov., 1835.

†† "Died at Cork, in his one hundred and twelfth year, Mr. Robert Pyne, in the full possession of all his faculties."—Metropol., 1833, p. 32.

ing life with all his manly ability and even gratifications.* The more advanced period of one hundred and fourteen displays a worthy Irishman in good bodily and mental sufficiency till he expired.† Such instances are a species of evidence that life is a boon to be desired and sought for, and not to be querulously declaimed against. In the Scriptures, we find it expressly represented as a blessing from the Almighty.‡ He may confer it through natural means, by leading particular minds to discover what will lessen disease or more frequently cure it. The perception of the benefits of inoculation was a benefaction of this kind granted to the last century; as vaccination seems to be in our own days.§

* "On Wednesday last, 21st Aug., 1833, died at Little Birch, Thomas Stallard, in the one hundred and ninth year of his age. He never, till within the last fortnight, had any severe illness, and he had the use of all his mental faculties to the last moment. He reaped his own wheat last year, and about two years previous he was seen hunting on horseback, and enjoying the sports of the chase with as much gusto as any sportsman in the field. His breakfast was usually toast and cider, of which beverage he drank freely till his decease."—Hereford Times, August, 1833.

† "Died at Dromartime, in the parish of Donoughmore, at the age of one hundred and fourteen years, Lawrence Cronny. He lived servant about seventy years in Mr. Innes's family, having survived to see the fourth heir of the Glen estate, now eleven months old. He was a trustworthy honest man. He attended Divine service every Sunday. At one hundred and thirteen he walked on foot to chapel with great firmness. He retained his recollection to the last moment."—Mark-lane Express, 18th June, 1836.

‡ "My son, forget not my law;
But let thine heart keep my commandments:
For length of days, and long life, and peace
Shall they add unto thee.
Happy is the man that findeth wisdom:
Length of days is in her right hand;
In her left hand, riches and honour.
She is a tree of life
To them that lay hold upon her"—Prov., c. iii., v. 1, 2, 13, 16, 18.
"By me thy days shall be multiplied,
And the years of thy life shall be increased."—Ib., c. ix., v. 11.
"The fear of the Lord prolongeth days,
But the years of the wicked shall be shortened."—Ib., c. x., v. 27.

§ When Sir James Mackintosh was at Paris in 1814, he met one day at dinner "Humboldt, La Place, Biot, and Poisson, a young man, the hope of geometry in France." He adds, "La Place said that the VACCINE, when it supplants the smallpox, will *add three years* to the medium duration of human life, which is at present twenty-seven years, and will then be thirty."—Life of Sir J. Mackintosh, vol. ii., p. 322. Vaccination sometimes fails in its expected benefit; but M. Camille

Some other examples also indicate that longevity to this extent may also be enjoyed without the loss of the MENTAL faculties. Four instances of persons of different characters and conditions of life, at the several ages of eighty-seven, ninety-six, one hundred, and one hundred and one, are now before me. In the first, we have the mental powers continuing as they were, though accompanied by a dislike or inaptitude for muscular motion.* In the second, life was continuing unexhausted in its full energies in all respects, and even with the two senses that so often decay in their organizations, while the mind is perfect in all its intellectualities—the sight and hearing—in complete freshness and utility.† On this point I may suggest, that it is a remarkable confirmation of the immortality of the soul that it has been frequently remarked, that, as one of these organs becomes inefficient, the mind is more acutely sensitive and active in the other.

The same perfect enjoyment of his vital faculties accompanied the individual who died as he completed his century.‡ The same undecaying spirit and advantages appeared in the

Bernard, in Nov., 1836, communicated to the French Academy of Sciences that he found it had taken effect in the leg when other limbs and parts had been inoculated in vain.

* "Last week died J. Coverdale, at Hawsker, near Whitby, aged eighty-seven. For the last fourteen years he had constantly lain in bed, not from weakness or infirmity, but by choice. He was fond of reading, and amused himself with books and newspapers. He was frequently visited by his neighbours and by strangers. He was of a cheerful, conversible disposition, and pleased with company."—Hull Advert., July, 1833.

† "Tunbridge, 2d Feb., 1835. There is now in this place a gentleman in his ninety-sixth year, in the full enjoyment of his physical and mental faculties. He frequently walks to Ticehurst in Sussex, a distance of about 16 miles, without complaining of the least fatigue. He often takes a walk to Southborough and back, a distance of six miles, before breakfast. His hearing is remarkably good. A considerable portion of his time is devoted to reading, which he does without glasses."—Mark-lane Express, 16th Feb., 1835.

‡ "Died, in his hundredth year, at Creech Grange, Dorset, Thomas Abbot, farmer. This worthy old man was not confined above two days to his bed. He had his eyesight most excellent. His mental faculties were good, and he walked about the house without any aid till within 48 hours of his death. He had resided on the same farm nearly 70 years. During the whole of that very long period, one undeviating line of conduct seems to have actuated his mind, that of the strictest honour and uprightness. He has left five children, being respectively sixty-two, sixty-four, sixty-eight, seventy, and seventy-two."—Dorset County *Chron.*, March, 1836.

female who was passing beyond his duration.* Facts like these are the lectures and lessons of Providence to us on this important point. They silently concur to unveil to us the undying nature of that living principle which we know and admire in the human understanding. The impartial thinker can hardly contemplate them without this impression arising within him. They are, at least, the best evidence which our Creator can give us in the phenomena of this life, that the soul is undestroyed by bodily age or decay, and that death only separates its essential vitality from its material frame when it ceases to actuate its nervous organizations.

If dotage or mental decay had been the natural or necessary accompaniment or consequence of extended age, the ancients, in their busy practical republics and national competitions and collisions, would have largely experienced such results. But, instead of finding feebleness or debility the companion of age, they had repeated testimonies of the contrary effect, and have recorded these in their writings which have come down to us. Plutarch was of such a different opinion, that he composed a treatise to show that the aged were not incompetent to manage public affairs, but ought to govern the commonwealth; and that the state or city would always be most prosperous where they commanded, and, when under their direction, the younger exerted their activities. He mentions some instances of their efficiency.†

The treatise of Lucian is curious on this subject for its enumeration of distinguished persons in antiquity who had

* "At the house of the Hill parish, Pemningham, near Ayrshire, *lives* Mrs. McNairn, who, in the hundred and first year of her age, possesses all her faculties entire. She can read her Bible without the use of spectacles. Her hearing is most acute, and her memory tenacious in a high degree."—New Farmers' Journal, 4th Dec., 1833.

"Near Laugharne, in Carmarthenshire, in January, 1835, died David John, aged one hundred. He could read his bills without glasses to the last."—Gent. Mag., 1835, p. 110.

† Thus he mentions, from Polybius of Massanissa, who died at ninety, that he had a son but four years old at his death; and a short time before he died, defeated the Carthaginians in a pitched battle. Phocion was as active in his old age, and when the Athenians, on a sudden levy, ordered all who were not sixty to arm and follow him, which displeased many, he asked them what they had to complain of in the call, when he who was to be their leader went out to the campaign at the age of eighty. He notices also Simonides, who, at the same age, won the public prize for composing songs and setting them to music; and Paulus, an actor, who at seventy acted in eight tragedies within four days.

lived from eighty to one hundred. As it may both amuse and instruct you to be made acquainted with them, I will class them under a few heads.

The first may be the celebrated kings and generals, of whom he notices several.*

The second shall be Greek philosophers, who were at the head of their different schools, and were famous in their day.†

The next will comprise historians, poets, and other writers.‡ These last two series show that the most intellectual men of Greece were remarkably long lived, and lead us to infer that there is naturally, and, where disease does not prevent it, a more natural connexion between active mind and longevity than is generally supposed.

But as all these were under a hundred years, my next letter shall take a view of those above a hundred in the last two centuries, whose ages and condition Mr. Easton collected from the notice of them in the periodical obituaries that have been

* As—Numa, eighty; Servius Tullius, eighty; Tarquin the Proud died in his exile at Cuma at ninety; Hiero, of Sicily, ninety-two; Agathocles, ninety-five; the Scythian Ateas, at ninety, fell in battle against Philip; Teres, king of the Odrysseans, in Thrace, at ninety; Antigonus died of wounds in battle at eighty-one; another Antigonus at eighty; Lysimachus fell in his eighty-fifth year; Antipater died at eighty; Ptolemy Lagus, in Egypt, at eighty-one: the regal founder of Pergamus, eighty; Mithridates, warring against Rome to his last hour, at eighty-four; Attalus, eighty-two; the Cappadocian king Arcarthas fell in battle at eighty-two; Artaxerxes Mnemon of Persia, eighty-six; or, as Dio said, ninety-four; Artaxerxes Ochus, ninety-two; Parthian kings, at eighty-seven and ninety-six; Artabazus made king at eighty-six; Tereus, ninety-two; and a king of the Bosphorus, vigorous in body at ninety.—Lucian, Macrob.

† The philosophers whom Lucian notices are—Zeno, ninety-eight; Cleanthes, ninety-nine; Xenophanes, ninety-one; Zenocrates, eighty-four; Carneades, eighty-five; Chrysippus, eighty-one; Plato, eighty-one; Critolaus, eighty-two; Diogenes the Stoic, eighty-eight; Posidonius, eighty-four; Athenodorus, eighty-two; Nestor, tutor to Tiberius, ninety-two.

‡ Xenophon, above ninety; Pherecydes, eighty-five; Hellanicus, eighty-five; Timæus, ninety-six; Aristobulus, ninety—he began to write at eighty-five; Polybius died from a fall; Hypsicrates, ninety-two; Anacreon, eighty-five; Stesichorus, eighty-five; Isocrates wrote his celebrated panegyric at ninety-six, and killed himself on hearing of the defeat of his Athenian countrymen at Cheronea at one hundred; Eratosthenes, eighty-two; Apollodorus, eighty-two; Sophocles was choked at ninety-five, and a few years before had composed his Œdipus Coloneus; Cratinus, the comic poet, ninety-seven—he wrote a popular comedy a little before his death; Philemon, a comic writer, ninety-seven; *Epicharmis*, a comic writer, ninety-seven.—Lucian, Macrob.

published, and who are marked as being efficient in their powers or faculties at this protracted age. All such instances concur to show that the intellectual principle within us is a living and active reality, of a different nature from its declining body.*

LETTER XXV.

Further Instances, showing that Longevity has been and must be a pleasurable and efficient State.—Facts as to the Diet which Long-Livers have used.—Cornaro's Experience.—Observations on our own Power of obtaining it.

My dear Son,

The preceding instances of longevity prove that both the mind and body have been efficient in human nature to its longest age in our terrestrial life; but as the effect, or at least the impression, of such evidence depends upon its amount, it seems to me to be useful to adduce further examples, in order, by their number, to establish the conviction that they are not the casual things which we regard as unaccountable accidents, which are not in the course of things, nor arise from settled causes; but that they are the steady and intended operations of the laws of nature which accompany our being on this earth. For the true opinion seems to me to be, that as duration without end, until spe-

* On the separate and distinct nature of the mind, Lord Brougham has made some very intelligent and forcible reasoning, in his discourse on natural theology. I fully coincide with him in the following remarks:—"The evidence for the existence of mind is to the full as complete as that upon which we believe in the existence of matter. Indeed, it is more certain and more irrefragable. The consciousness of existence, the perpetual sense that we are thinking, and that we are performing the operation quite independently of all material objects, proves to us the existence of a being different from our bodies, with a degree of evidence higher than we can have for the existence of those bodies themselves, or any other part of the material world."

I think this application of the mental and moral phenomena as proof of the existence of the Deity an important addition to our natural theology. The best interests of society induce us to welcome all such contributions on these noble subjects from intelligent men who have taken any lead in worldly affairs.

cially annihilated, is the essential property of the living soul within us, so longevity is the natural property of the body it is invested with here; and earlier death is the product of diseasing and deranging causes, extrinsic to its material constitution, and therefore subject to the modifying and healing power of human skill and knowledge, under the permission of the all-governing Creator and Preserver. Unless we believe this truth, we shall take no pains to acquire the benefit; but in proportion as we accustom ourselves to think that the lengthening of our life is greatly within our own power, and may be also made and will become a desirable enjoyment as long as it can be continued, we shall so much more value our present life, and be solicitous to find out and practise what will most prolong it. But to do this will be increasing the stream and sum of human happiness both to ourselves and others; for no one can be happier without others benefiting from it; and no one can secure and increase either his own felicity or his longevity in his present life, but by the practice of those moral means and virtues which are always wise and advantageous, and which, like light and heat, cannot exist without diffusing themselves around, pervading and benefiting whatever they come in contact with.

Extreme longevity is of itself a very curious subject, if it were regarded only as a theme of our intellectual contemplation and inquiry, as to the causes from which it originates in the favoured individual. It is a pity that intelligent men in their neighbourhood have not made such persons, and their preceding life and habits, more the object of their investigating attention; for then science might have had some elucidating facts on which it could have soundly reasoned. The subject is also of great moment to us, from its connexion with many questions as to the nature and qualities of our living and thinking principle, and as to the relations with its corporeal functions and organizations, and essential independence of them, even while it is affected by them. On all these accounts I will devote another letter to the consideration of other examples of great longevity, which various obituaries have enabled others to collect, and will arrange them under such heads as will most satisfactorily illustrate the inference to which they will lead us. You will then have all the laws and principles of the plan and economy which have been settled and carried into execution by our Creator as to our earthly

life as extensively before you as I am able to place them; but while I desire to make them sufficiently copious, it shall be my study to be as brief as possible.*

The well-known Cornaro lived to one hundred, and describes with animation his own efficiency when he wrote five years before. It is a pleasure to read his expressions of his happy feelings, even in the phrases of his self-satisfaction.† Such instances and such effusions show us that human existence is a happy state of being, and that its prolongation is not that misery which so many writers represent it to be. It has been gloomily described by some with mournful and disfiguring declamation, in order to create that dislike of it which would urge us, as a relief, to think more of our succeeding

* We may begin by mentioning those of one hundred and above whose deaths are in the obituary of a single month in the Gentlemen's Magazine for January, 1837.

"Near Letterkenny, in Donegal, Eleanor, relict of Mr. Charles Gallagher, at the extraordinary age of one hundred and nine years. Only fifty years ago she gave birth at once to three children, two of whom are living.

"Nov. 11, at Old Derby, near Haverfordwest, aged one hundred and three, Elizabeth Page. She retained her faculties to the last.

"Nov. 10, at Hatfield Woodhouse, in her hundredth year, Mrs. Betty Smith, retaining all her faculties nearly to the last.

"Oxon, Dec. 4. At Thame, in her ninety-eighth year, Mrs. Anne Hooper, spinster. On that day month preceding her sister, Mrs. Mary Hooper, in her hundredth year.

"These ancient ladies could read and sew without the aid of spectacles, and possessed all their faculties to the last; and would amuse their visitors with a narration of the miserable incidents of the great fire at Haddenham ninety years ago. A few months since, Mrs. Fidd, a sister, died in London, aged ninety-two; and about twelve years ago, Mr. L. Hooper, their brother, died at Thame, aged eighty-six.

"At Michaelstow, Mary Conch, at one hundred and two.

"At Woodhall, in Cumberland, Rachael Wilkinson, aged one hundred and four. Bereft of parents when young, she supported herself by frugality and industry, and never applied for parochial relief."

The same month contains notices of four other individuals between ninety and one hundred; and eighteen others between eighty and ninety.

† "I am now ninety-five years of age, and find myself as healthful, brisk, and airy as if I were but twenty-five years old. I relish all I eat, sleep quietly, and none of my senses fail me. I have still a lively fancy, a happy memory, a sound judgment, a strong heart. My voice is more tunable than ever, so that I can chant forth my office every morning more easily than I could in my youth."—Cornaro on Long Life, p. 101, 108. Cardan, who knew him at eighty, mentions that he could either ride or walk on foot very well, and composed a comedy which came off with applause. De Thou says that he died at Padua, calmly and without any pain, above a hundred years old.

destination. But, however well meant, this melancholy painting is both a mistake and an untruth, and, being so, has occasioned greater injury than benefit. It has driven far more into morose dissatisfaction with their Creator than it has excited to prefer and pursue the celestial promises and prospects. It is the due appreciation of him here which will make us more desirous of being under his care and in his kingdom hereafter; and the more we feel the happiness of this life, and regard it as derived and given to us by him for our enjoyment, the more assured we shall be that the same principle and the same effect, with unbounded longevity, will shape and govern our future condition still more advantageously. Indeed, experience has proved that the same paths and conduct which will cause us to be most happy here will be most operative to ensure our felicity hereafter. Faith, trust, hope, resignation, adoration, obedience, benevolence, activity, moderation, and self-government are the most effective means for making every season of this life most prolific of daily comfort to us, and will equally prepare us for the elysium that is offered to us in the realms that lie beyond our earthly graves. Thus, the virtues and conduct that will act most efficaciously on our future allotment will do most good to us, both in our body and in our mind, in our present condition; will most avert or extenuate disease; will most produce good spirits and good temper, and most promote our social sympathies and our intellectual improvement. Let us, then, study to be happy, on these principles, in this life, and we shall find them the sure wings of conveyance to all that will be happier in the next; and let us learn, from the facts which the long-living present to us, that long life may be always a blessing to us; and if it has been so to others without any peculiar care, how much more certainly may we make it such by those habits and qualities whose divine effects will suit and irradiate every region of the universe!

The marriage of individuals is one of the strongest indications they can give us that they are in possession of the powers of active life and comfort, and several persons in their centurial age have given this evidence of their efficiency.*

* "In 1733 died, at one hundred and twelve, William Hasseling, of Chelsea College, of which he was the oldest pensioner, mentioned in Let. XXIII., p. 219, note †. He married and buried two wives after he was one hundred; and the third, who survived him, he married at the *age of one* hundred and ten. Besides his pension from the College, he

Another testimony of pleasurable longevity appears in those who have reached its termination in continued health, and have passed their lives without disease. There are many instances of this.*

A great many, of various ages from one hundred and five to one hundred and forty, are noticed to have died in the possession of all their faculties.†

was allowed a crown a week from the Duke of Richmond and Sir Robert Walpole."—Easton, p. 17.

"In 1759 died Donald Cameron, of Kumichlabar, in Scotland, aged one hundred and thirty. He married at one hundred."—Ib., 53.

"In 1776 died Mary Yates, at one hundred and twenty-eight. She was hearty and strong one hundred and twenty years, and married a third husband at ninety-two." Her death is recorded on a small board in Shiffnal church, Shropshire.

"In 1778, William Eving, of Wednerfield, near Wolverhampton, died at one hundred and fifteen. He married his fourth and last wife at one hundred and four."—Ib , 157.

"In 1780 died, at one hundred and fifteen, Henry Grosvenor, of Inch, in Wexford, surveyor of the coast. He was an agreeable, cheerful companion, and at the age of one hundred when he married his last wife."—Ib., 167. Several other instances of this kind occur.

* In 1739, Margaret Patter, a Scotswoman, died in St. Margaret's workhouse, aged one hundred and thirty-seven. "She always enjoyed good health till within a few days of her dissolution."—Ib., p. 21. Grace Sandby, of Bewdley, in Staffordshire, died at one hundred and twelve. "She was never ill, and therefore never took physic."—Ib., p. 35. Another woman, at one hundred and ten, in 1753. "She was never afflicted with illness, and died suddenly."—Ib., p. 37. So others, at one hundred and four, one hundred and six, one hundred and seven, one hundred and eight, one hundred and twelve, &c.

† One at one hundred and forty, mentioned before, p. 216. In 1740, Mr. Davis, of Harris's Coffee-house, in Fleet-street, died at one hundred and ten. "He retained all his faculties to the time of his death, and could see to read well."—Ib., p. 22. In 1742, James Littlejohn, in Scotland, at one hundred and eighteen. "He had seen Charles I. and Oliver Cromwell in Scotland, and described them very justly. He retained all his faculties to the time of his decease."—Ib., p. 24. In 1751, a beggar-woman at Dublin was one hundred and twenty. "She retained all her faculties to the moment of her decease. In different parts of her bed there was found concealed 250*l.* in cash."—Ib., 34. In 1757, William Sharply, in Roscommon county, one hundred and thirty-eight. "He was able to follow his profession of lath-making until within six weeks of his death, and was remarkable till then for carrying a log of uncommon bulk to his place of work."—Ib., 45. In 1774, John Tice died at Hagley, one hundred and twenty-five. He was patronised by Lord Littleton. "At eighty both his legs were broken by the fall of a tree; and at one hundred, from a fit, he fell into the fire, and could not extricate himself; a person coming accidentally into the room preserved him from death, although he was much burnt. In a short time he recovered, and took his customary walks. He retained all the faculties of his mind to the time of his death. His younger brother died at one hundred and

The possession of eyesight, and the ability to read without the aid of glasses, are also striking tests of the perfect organization and of healthful functions continuing in the long-living individuals. This desirable advantage has been frequently noticed.*

The power of walking is a striking proof that the active powers of the body are continuing with the duration of life. I feel this fact very much from my own deficiency in this respect. I find that many could walk in the various ages from one hundred and two to one hundred and thirty-three.†

two."—Easton, p. 146. Numerous other instances occur of the full possession of their faculties from one hundred and four to one hundred and seventeen years.

* 1755, Peter Bryan, one hundred and seventeen, of Tyrone county, "could read the smallest print without the assistance of a glass."—Ib., p. 41. 1749, Mr. Hare, one hundred and seventeen, of Stowe. "He had been in the service of Lord Cobham's family upward of eighty years. He enjoyed his sight and hearing till a few weeks before his death."—Ib., 30. 1774, Margery Bonefaut, one hundred and fourteen, near Barnstaple, Devon, "could see to read to the last."—Ib., 145. 1762, Robert Ogilvie, one hundred and fifteen, a travelling tinker; "born 6th Nov., 1647, as appears by the register of Rippon; was married seventy years, and had twelve sons and thirteen daughters. He had all his senses perfect, and could see to work a short time before his death. His wife lived to be one hundred and six years old."—Ib., 67. 1780, Mr. Gernon, one hundred and twenty-five, of Louth county, Ireland, "could read very small print to the last."—Ib., 166. 1783, Margaret Melvil, one hundred and seventeen, of Kettle, Fifeshire. "She renewed several teeth at one hundred years of age; never had an hour's illness, and could see and hear well till the day before her death."—Ib., 187. Several others to the same effect have been noticed from one hundred and two to one hundred and eleven.

† 1769, Mr. Butler, one hundred and thirty-three, of the Golden Vale, near Kilkenny. "He was related to the family of the Duke of Ormond; could walk well, and mount his horse with great agility to near the time of his death."—Ib., p. 113. 1767, John Hill, one hundred and thirty, of Leadhills, near Edinburgh. "He used great exercise on foot, and walked two miles to a christening a short time before his death."—Ib., 97. 1756, Margery Brider, one hundred and thirteen, of Willy, Shropshire. "She danced with the morris-dancers the year before her death."—Ib., 43. 1742, John Phillips, one hundred and seventeen, of Thorn, near Leeds, Yorkshire. "He lived under eight crowned heads, and was able to walk till within a few days of his death. His teeth were good, and his eyes and hearing tolerable. About the age of twenty-eight, being constable of his parish, he, upon some disorders, committed two of Oliver Cromwell's soldiers to the town stocks; who, far from resenting it, wished that every one of his men had but half his courage."—Ib., 23. 1750, Robert M'Nish, Esq., of Greenlock, in Scotland, one hundred and ten "He had, within a year of his decease, mounted his horse and rode a hunting."—Ib., 82. Many others had this bodily efficiency.

ral have been stated to have had other bodily powers
ivities in their advanced age.‡
r knowing all these facts, surely no one need dread the
iance of life to any granted extent, nor suppose that it
e a burden or a discomfort. Nature and its Author,
examples, show us that it need not be either. There
w that it should be either dotage or suffering. And
pply due care to keep off what will be prejudicial to us,
t is within our own power to regulate, it will be a pe-
as much happiness as any other part of life, though it
ve weaknesses and infirmities. These I know to be
ll inconsistent with great and continual enjoyment and
t. It will always rest chiefly with ourselves whether
shall be good or evil to us: and in the worst alterna-
e causes which bring the mischief will bring also the
ation that will terminate it.†
ll be a reasonable inquiry of your curiosity if any in-
on has been given of the diet of these long livers, so
nable others to profit by their example in this respect.
are some notices about this which are worth remem-
though they be not such as to enable us to establish
tain links between the effects and a definite and dis-

hese I will only mention a few. 1773, Jane Godfrey, one hun-
ten, of Benham, Suffolk. "She carried a bucket of water a great
within a week of her death."—Easton, p. 136. 1770, Dorothy
e hundred and twelve, near Southwell, Notts. "At the age of
dred and two she reaped wheat against a man a whole day."—
1763, Thomas Sprat, one hundred and fifteen, of Haltwistle,
berland. "His faculties were so strong that he could sing a
tle before his death."—Ib., 68. 1698, John Moore, one hundred
, of Lymington, Hants, a peddling ironmonger. "He was re-
y fresh and lively to the last, and could bear the severest
"—Ib, 13. 1687, Stephen Rumbold, one hundred and five. On
at Brightwell, in Oxon, is this inscription:—

"He lived one hundred and five,
Sanguine and strong;
A hundred to five
You live not so long."

aps one of the most remarkable instances of effective longevity
f Jonas Surington, who died in 1747, aged one hundred and fifty-
He resided in a small village near Bergen, in Norway, and re-
he perfect use of his faculties to the last hour of his extraor-
ife. The day before he died he assembled his family, and divided
erty among them. He had been several times married, and left
him *a young widow* and several children. His eldest son was
dred and three, and *his youngest nine years of age*."—Easton,
ong., p. 275.

criminated cause; but such as I have met with I will briefly state.

A few instances indicate that longevity has sometimes occurred, without any particular care with respect to food and habits.* But these rather belong to the class of exceptions to general rules than to that of models to be imitated; for all ages have found that bodily indulgence tends to shorten human life to the largest numbers.

Temperance and exercise have been remarked as the habits of many who have reached the greater extensions of longevity.† Moderation and regularity are great preservatives, even without abstemiousness.‡ As to particular food, some lived much on milk:§ vegetable diet has been used by

* Thus, in 1752, one died at one hundred and two, in Berks, who had been "a very free liver, but perfectly healthy to his death."—Easton, p. 36. Another, an Irishman, of Kerry, died at one hundred and eleven, who at the age of eighty-four had married a young fifth wife, and had by her twenty children. "He was always very healthy; no cold affected him; he could not bear the warmth of a shirt at night, but put it under his pillow; yet for the last seventy years, when in company he drank plentifully of rum and brandy; and if, in compliance with solicitations, he took claret or punch, he always drank an equal glass of rum and brandy."—Ib. In 1790 the Rev. Mr. Davies died at Hereford aged one hundred and five. "The last thirty-five years he never used his feet but to go up or down stairs, and to step from room to room. His breakfast was hearty, of hot rolls and butter; his dinner was substantial, and of a variety of dishes; at his supper he generally ate roast meat, and always drank moderately of wine. He had neither gout, stone, nor colic, and lived beloved by all who knew him."—Ib., 237.

† In 1765, Mr. Dobson, of Hatfield, farmer, one hundred and thirty-nine. By much exercise and temperate living he preserved his health. Ninety-one children and grandchildren attended his funeral."—Ib., p. 87. 1763, John Michaelstone, one hundred and twenty-seven, "grandson of Thomas Parr. He lived to this age by extreme temperance and much exercise."—Ib., p. 75. 1771, Mrs. Boyce, of Guilford, one hundred and seven. "By temperance she acquired constant health, and retained her senses to the last."—Ib., 121.

‡ In 1756, Ann Maynard, of Finchley, one hundred and twelve. "She lived with moderation, and took much exercise."—Ib., 44. 1765, Janet Anderson, of Newington, Middlesex, one hundred and two. "Her life was regular and moderate. She was remarkably active, and able to perform her work, spinning, to near the time of her death. Her faculties were very strong to the last."—Ib., 81. William Sharpley, one hundred and thirty-eight, mentioned in note †, p. 239, "lived well and regular, but in nowise abstemiously."—Ib., 45.

§ "Margaret Saker, one hundred and thirty-seven, "for many years subsisted mostly on milk."—Ib., p. 21. 1782, Val. Cateby, of Preston, near Hull, one hundred and sixteen. He had been a sailor 36 years, and afterward a farmer as long. His diet for the last twenty years was milk *and biscuit*. His intellect was perfect till within two days of his death.

* Others used tea from the native herbs of our coun-
Some preferred diluting liquids, that were neither strong
mulating.‡ Even sugar and water has been sufficient
ain lengthened life for a short time.§

n, 180. 1792, Anne Froste, of West Rais, in Lincolnshire, one
and eleven. "She was married to her last husband in her
hird year. For many years she had lived on milk and tea diet."
0. 1753, Margaret Hunter, of Newcastle, one hundred and four.
everage was mostly water or milk."—Ib., 38.
, Judith Banister, of Cowes, one hundred and eight. "She lived
scult and apples, with milk and water, the last sixty years of her
he was attended to her grave by 80 of her descendants."—Ib., p.
5. Elizabeth Macpherson, of Caithness, one hundred and seven-
Her diet was buttermilk and greens. She retained all her
till within three months of her death."—Ib., 83. 1783, Anthony
of Guipuscoa, one hundred and fourteen. "He never had any
s. He retained his senses, and had all his teeth and hair to the
is death. He ate nothing but bread made of Turkey wheat, and
dly abstained from wine and tobacco."—Ib., 190. Alexander
, one hundred and twelve, for the last ten years lived entirely
ables.—Ib. 1780, Joseph Ekins, of Combe, Berks, labourer, one
and three. "He never suffered a week's illness, and for the
y years subsisted entirely on bread, milk, and vegetables."—Ib.,

, John Hussey, of Sydenham, Kent, one hundred and sixteen,
a farmer, of Crawford. "His breakfast was balm tea sweet-
th honey, and pudding for dinner, above fifty years."—Ib., p. 29.
uellen Pryce, of Glamorgan, one hundred and one. "His organs
n so little injured by the weight of years, that, within three
f his death, he directed a village choir, with some variations, for
day. He never used spectacles till within fifteen months of his
ion, and possessed a great flow of spirits, attended with sound
nd activity, the result of his abstemious manner of living. Herb
re his breakfast; meat, plainly dressed, his dinner; and, instead
per, he refreshed himself with smoking a pipe of tobacco. With a
education, he had a strong natural genius, and wrote a poem
'Carmenta,' predicting, with great humour, the events of the ad-
ation of the Duke of Newcastle."—Ib., 161.
, died Mr. Smith, of Dolver, Montgomeryshire, farmer, one
and three. "He was never known to drink anything but but-
."—Ib., p. 203. 1787, Susannah Greenfield, of Potton, Bedford-
ne hundred and five, a maiden lady. "She had for the last forty
ved chiefly on flour provisions, and her only drink was wine and
—Ib., p. 214. 1790, James Peters, of Dundee, one hundred and
a travelling packman. "Although he often slept in the fields and
he enjoyed an uninterrupted state of good health, and, until the
r of his life, retained his memory. His strongest beverage was
eer."—Ib., 229.
, Rebecca Joseph, of Malpas, near Newport, in Monmouthshire,
ndred, widow. "She retained all her faculties to the hour of her
, and, till within three years previous to it, could walk without
p of a stick. She was not known to have a fit of illness from
ancy sufficient to confine her to her bed till within a month of her

The example and advice of the Cardinal de Salis may close this enumeration of the various diet of the long livers,* with the addition of that of the celebrated Cornaro, who found at seventy-eight that a sparing diet was essential to his health and comfort.† By the persuasion of his friends he increased it only a sixth part, and it brought on disease with mortal tendency;‡ but, resuming his abstemiousness, he was in a joyous and vivacious state at eighty-three,§ and so continued until he completed a century. His food was varied and gratifying,‖ but his spirits and safety depended on its being

death. She lived a very temperate life, though she had kept a little public house for seventy years. Her chief sustenance for the last two years was brown sugar and cold water."—Easton, p. 244.

* He was Archbishop of Seville, and lived to one hundred *and ten*. He enjoyed to the last every faculty except strength and hearing. When asked by his friends what regimen he observed, he used to tell them—"By being old when I was young, I find myself young now that I am old. I have led a sober and studious, but not a lazy or sedentary life. My diet was sparing, though delicate: my liquors, the best wines of Xeres and La Mancha; but never at any time exceeded a pint, except in cold weather, when I allowed myself a third more. I rode or walked every day, except in rainy weather, when I exercised for a couple of hours. As to the mind, I endeavoured to preserve it in due temper by a scrupulous obedience to the Divine commands, and by keeping a conscience void of offence towards God and man." He was the last surviving son of the author of "The Conquest of Mexico."—Ib., 203-5.

† "If a man is willing to live long in the enjoyment of his food, let him live sparingly." His habit was to take twelve ounces of food a day, in bread, soups, yolks of eggs, and meat, and fourteen ounces of wine.—Cornaro on Old Age, p. 32.

‡ He increased what he ate to fourteen ounces, and his drink to sixteen. "This augmentation of diet was so prejudicial to me, that, brisk as I had been, I began to be sad and out of humour. Everything offended me; and upon the least occasion I broke out into a passion. At twelve days' end I was taken with a violent fit of the colic; that was followed by a continual fever, which tormented me for thirty-five days together. For the first fifteen days it put me into such an agony that it was impossible for me to take a quarter of an hour's sleep at a time. My friends several times believed me to be a dying man. Nothing freed me from this danger but resuming the regimen which I had so long observed."—Ib., p. 33.

§ "The life I lead is as happy a one as can be wished for in this world. I am still so strong at fourscore and three as to mount a horse without any help. I can not only go down stairs without any concern, but likewise descend a hill. I am always merry; always pleased; always in humour; and maintaining a happy peace in my own mind, the serenity of which appears at all times in my countenance."—Ib., 50.

‖ "What I eat is as follows: bread, soup, new-laid eggs, veal, kid, *mutton*, partridges, pullets, and pigeons. Of the seafish I choose goldenies [*John Dories?*] and of the riverfish the pike."—Ib., p. 81.

small in quantities; and this is the advice which he gives to all who wish to have what he calls a "happy and blessed life," by being so regulated.* His farther remarks on the benefits derivable from longevity deserve also to be remembered.†

All these facts and views may lead us to the conclusion that it is one of the Divine laws of life to put our individual prolongation of it in our own power, subject always to his sovereign will. But his plan and principle seem to be, to leave it to us to curtail or protract our stay on earth according to the care we may choose to take of it, and to the habits that are favourable or inimicable to it. He has connected it more especially with our self-government; and, by the first command he gave, has pointed out to us on what this should be chiefly exercised. Longevity is more connected with simple and temperate diet, and with that self-regulation which, in the daily opportunities of indulgence, and in the possession of the procuring means, we are least disposed to practise than we are aware of or like to suppose; yet daily full habits of feeding are not favourable to durable life. But careful diet, in a wisely-regulated quantity, though one of the talismans of long life, is not the only one. All other habits should be directed to the same end; and this will require much selecting judgment and determining resolution; for the customs of society have been adopted and are in full practice without any reference to it, and therefore are in many points incompatible with it. But they are needlessly so as to the enjoyment of life, whatever other purposes they may answer; for those gratifications which most favour continuous vitality will be found in their course more pleasurable than such as invade it. What injures the functions of life hurts the spirits and the

* "Oh happy, blessed, and regular life! how worthy art thou of our esteem! How much dost thou deserve to be preferred before thy contrary!"—Cornaro, p. 49. "A good regimen is necessary for the prolonging our days, and it consists in two things: first, in taking care of the quality, and, secondly, of the quantity, so as to eat and drink nothing that offends the stomach, nor any more than what we can easily digest. Our experience ought to be the guide in these two things."—Ib., 72.

† "It is the will of our Creator that we should attain to a long life. He has appointed man to this, because, in his old age, he will be freed from the bitter fruits that were produced by sense, and may enjoy the good effects of his reason. He then bids farewell to his vices, is no longer a slave to the devil, and finds himself in a better condition to provide for the salvation of his soul."—Ib., ch. 3.

temper, brings on lassitude or pain, and fixes corroding diseases, as well as occasions the more rapidly-destructive ones, or promotes their fatality. Hence we are our own worst enemies in this point, and are every day rousing the evil agencies into action upon us, to accelerate that mortality which we complain of, yet will exert no due skill, and care, and self-coercion to avert. But if, from the desire of present gratification, as it occurs, we will not take this trouble, nor study the subject as carefully as we attend to many far less important things, we are the authors of those early abbreviations of our life which we so much lament and are saddened by.

For the first portion of our existence, we are at the mercy very much of our parents and nurses. They must learn more correctly the laws and causes on which infant and younger life depend; and if they were to make this an important branch of their intellectual attention, and would adapt their own habits and mind to guard and cherish, with enlightened judgment, the vital principles of their newborn generation, the mortality of this period of life would be very considerably diminished. It is lessening already; and the same moral feeling and parental improvements which have produced this melioration are pledges that it will soon be much more extended and more certainly assured.

But when we have ourselves attained that power of observation and thought which grows rapidly within us as we pass from youth to manhood, the springs of health and life are then under our command as far as human judgment can effect them. We then become responsible for the prolongation of our existence in all those things within our power by which it may be shortened or enlarged. If we will not take the trouble to learn and mark what actions, indulgences, or habits tend to abridge or promote it, but choose to walk through life in a wilful ignorance on the subject, which we suffer ourselves to remain in, on any point that is important or deeply interesting to us, we are the authors of that brevity of life which we have brought upon ourselves. The Creator has enabled us to trace his laws concerning it, if we will apply the same care and impartiality in discovering them as thousands are exercising in their daily professions and in the various departments of natural science. It is the Divine plan to leave our longevity here in our own power to the same *extent in* which he has given us room and license to improve

in so many other worldly comforts. All his counsels and precepts tend to promote this blessing to us on this earth, as well as to prepare us for our hereafter; and the more steadily we follow his rules, and increase in our virtues and piety, the longer will our vitality and all its comforts be preserved and protracted to us. Perhaps we do not sufficiently feel the value of our present life, nor educe those benefits from it which will be of inestimable importance to us hereafter, and which our present scenes can be made to yield. To live for this life only when we must pass into another is so repugnant to the dictates of sound judgment, that we may suppose that, as the intellect and knowledge of society enlarge and become more correct, a less erroneous system of living will be gradually and more generally adopted, which will suit alike our positions both in this world and in the next.*

LETTER XXVI.

Dotage and Disability of Mind or Body no necessary Companion of Longevity.—Continuity of Existence anywhere can be no Prejudice to an Immortal Soul.—The Divine Plan of Human Life and Revelation is founded on its being Immortal and Improvable.

My dear Son,

Having taken this varied survey of the more prominent facts which have been collected and recorded on the subject of long life in man, let us pursue a few of the rational trains of thought to which they invite us. They seem to warrant the following conclusions:—

Longevity, to one century of duration in many, and to portions of a second in some, has been an established law of human nature from the deluge to the present hour, in all climates, regions, and states of society, though varying in the

* One curious fact of nature's removing blindness in old age deserves commemoration. "Mrs. Wade, wife of T. Wade, farmer, of Whepsted, now in her eighty-fifth year, after being blind upward of twenty-eight years, has had her sight restored within the last few weeks, without the attendance of a surgeon, or taking any medicine whatever."—Standard, November 24 1836.

number of the long-living individuals, and in their proportion to the rest of their contemporaries.

It has been enjoyed by so many in full and continued health, with so many bodily as well as mental gratifications—with so much active industry and usefulness—with the senses so unimpaired—with walking power and with undiminished intellect, that it must be deemed a desirable good—a benefit to be sought for and valued—a blessing to be gratefully received. Disability of body is no necessary consequence of it. All the stages of life after manhood are attended with a diminution of manly strength, as well as extreme old age, and with several bodily infirmities; but infirmity is not unhappiness, nor even discomfort, as I personally know, and as thousands of old men will declare.*

Dotage, loss of memory, imbecility, or defect of mental powers, is no necessary or natural companion of longevity. Neither of these arises from any decay in the mind. That remains in its internal self what it was when advancing into the senility of its earthly years; and all the altered phenomena which it may in any exhibit arise from bodily causes and changes—from organical or functional diseases—from ossifications, aneurisms, congestions of blood—watery effusions, lesions of parts or vessels—indurations, or other alterations of substance injurious to the nerves—inflammation or paralysis of some of their ramifications—ganglious or fibrous reticulations, or other causes by which the communication of the mind with the external world, its power over its sensorial organs, or its use of those of speech, or the connexion between these and its thoughts, is prevented or interrupted. In these cases the mind of the individual becomes confined to itself, and is as much withdrawn from the perception of others as a prisoner fastened in a dungeon becomes lost to society, and is no longer visible by it. Its concern with this world is then terminated. It has only to await its passage into the next; and to

* Another instance of efficient longevity has just occurred. "On 27th January, 1837, died at Kennington the oldest inhabitant of Kent, at the age of one hundred and eight. She was born there on 29th September, 1728; her parents were labouring people. In 1750 she married. Her faculties were unimpaired to the last. She could narrate events which happened as far back as 1747 with surprising accuracy; and her eyesight was so good that it never required the aid of spectacles. During all her life she abstained from spirituous liquors, indulging only in tea."—*Kentish Herald*, 1837.

that, death must be its conductor, and has been appointed to be so

These views induce me to believe that what are called or found to be the miseries or dotage of old age arise always from material causes, extrinsic to our principle of life, and not essentially or necessarily connected with longevity; but are accidents occurring to it from external things. As such they are avertible or remedial by human skill and means, so far as it is the will of Providence as to the individual that he should or should not be subjected to them. The Divine will either leaves us to ourselves, or, if we seek its direction and government, will regulate for us what is most momentous to us, according to its own wisdom and purposes. But, reasoning on natural and human causation only, my inference from all that I have read, or seen, or felt, cannot but be, that the grievances of old age spring oftenest and principally from previous or continued wrong habits in ourselves, which have disordered some of the functions, which affect the vascularities, or which have injured or oppressed the nervous or brainous system of our frame.*

If this be the fact, then, so far as it is operating, the evil operation may be checked or lessened when our knowledge and discernment have discovered and can apply the available correctives; and the benefit which they may impart, our increased and sustained self-government may for some time

* A circumstance appears in our periodical papers while these pages are preparing for the press, which illustrates the action of bodily causes on the mind, and the benefit arising from the removal of the depressing matter. M. Nobil lately read a paper to the Medical Society at Ghent on the effects of the loss of a great part of the substance of the brain. A youth, of a gloomy and saturnine disposition, and of a limited degree of intelligence, fancying that a girl to whom he was attached was deceiving him, fired a pistol with two balls at his own head. They passed out at the same orifice, and with them a portion of the brain sufficient to fill two moderately-sized teacups. He became immediately insensible; but in twenty-four hours recovered his consciousness, but with loss of sight. Each day, when the wound was dressed, portions of the brain came away with the dressings; but by the twenty-eighth day the injured part was healed. After the healing a surprising change took place in the character of the youth. Instead of being, as before, gloomy and taciturn, he became lively, intelligent, and talkative; and suggested a variety of improvements in matters which seemed previously beyond his comprehension. He did not recover his sight, but his other senses remained intact, though the loss of cerebral substance amounted probably to the whole of the left anterior lobe of the brain. He survived the injury two years.—*New Monthly Mag., 1837, p. 144.*

perpetuate. Believing the principle of life and thought to be undying and immutable by any temporary association of material particles, I cannot but think that any dotage or deficiency of mind which individuals may exhibit as they grow old is a contingence of disease, and no deterioration of its personal essentiality. It may not be remediable when it has once fully taken place, because in all ossifications and schirrous indurations the parts may be in time so altered that no art can reduce or restore them to their former and efficient state. But what cannot be cured when it has come fully, may be prevented by preceding care, under the guidance of an enlightened judgment and persevering resolution.

Dotage or imbecility must be unnatural to our vital and intellectual principle, because that can never grow old. To be eternal, it must always retain its same living energy and power. If it could in itself decline into idiocy here during the limited term of our longest life, the debilitation would increase with the continuity of its existence, and therefore it would be utterly unfit for an immortal being hereafter; for to be impaired in that infancy of it which its human life comprises would present a hopeless prospect of its future talent and efficiency.

It must be, therefore, an essential principle of the soul's vital nature, that no prolongation of its conscious existence shall anywhere injure it, if it has been created to be a resident in an everlasting kingdom. But on this fact of its future eternity the whole system of our divine revelation has been based. We die here to rise to immortal life from the death we undergo. To procure and ensure this blessing to us our Saviour came to our earth, taught, lived, and suffered as our Christian records state; and his resurrection from his Judean tomb has been declared to be, and to be meant to be, the pledge, and representation, and assurance of our own. Certain, from this, that we are destined to enjoy an immortal existence hereafter, the longevity of the soul must be always a continuity of its natural self, undecaying as undying; for decay and eternity are incompatible with each other; and what has been made to last for ever cannot be, in any part of its existence, a declining or debilitated being. It is, therefore, bodily disease which gives to our senses the appearance of imbecility; and if this could be removed, the soul would resume its preceding efficiency.

The sacred history of the world, its plan, the Divine purposes in human life, the great truths and prospects revealed to us by our Saviour, seem to me to be founded on the two great principles of our intellectual nature—its immortality and its improvability. That mankind have not been generally what they ought to be, no one will dispute: that they are better than they have been, almost, if not quite universally, who can study history and geography without perceiving? That mortality was attached to their earthly life because they would not obey their Creator, nor be and do what he commanded and counselled, is the language of revelation at every period of its communications. That the Deity, in all his interferences and legislations, has sought to meliorate his human race by enjoining and desiring them to live and act in conformity with his wishes, is manifest to all who read what has been expressed by his authority and in his name. These facts and principles appear in all the Sacred Writings before our Saviour came. But when he disclosed his purposes and instructions, they were connected inseparably with our improvement and immortality. His future kingdom, the world of eternity of which we are to be inhabitants, was presented by him to our view as the certain sequel of our present being; and to this the everlasting nature of the soul has been adapted. But to make this state of our existence as happy as it will be desirable, he called upon us to acquire the feelings, the qualities, and the habits; to adopt the ideas and views, and to accustom ourselves to the practice of the virtues and actions which he enjoined and illustrated. These requisitions attest the improvability of our nature; for, if this could not be improved into them, it was useless to teach them. His principle was, that we were, in our usual state, sinning and offending beings; but that we were convertible and alterable from this condition into the meliorations which he encouraged us to attain, and which would make human nature pleasing to its God. But this great change could be effectuated only by his assistance. This aid was promised if sought for; and what he taught as to the agency and efficacy of the Holy Spirit on the human mind, and of that spiritual regeneration which he mentioned, discloses and confirms to us the fact that improvability is the natural property of every individual mind; and therefore, at every period of our life, we shoudl remember that the two great certainties which are attached to our present

personality, in its living state on this earth, are its immortality and its improvability; and it is indispensable to our welfare that we should always conduct and regulate it with reference to these its qualities, which are unalienable from it, and which, being so, require such a use and course of our present life as will be consistent with them and congruous with their inextinguishable reality.

These considerations present to us one vast advantage of lengthened life, to which every one may make it conducive, and which attaches to it a value so inestimable as to be an object for our earnest desire: this is, that the longer we live, the more improvements we may acquire in our present state of being, and the more advanced we then shall be in that progression and melioration of our nature to which the inspired Christian teachers so emphatically invite us.

Age and longevity are peculiarly favourable to these results, and have been designed to be so. The stimulations of those passions and appetites which in younger life create a contest between inclination and duty, have then ceased or become feeble, and are more easily governed. Our impulsive projects, hopes, and activities have subsided into sober reasoning and experienced judgment. The world around us has lost much of that enchantment which so much fascinates in its first novelties, and in the delusive expectations which it excites. What we have ardently wished we have by that time attained, or have relinquished as either unattainable or undesirable. The mind is therefore less agitated and deceived; so much of its term of existence here has been passed, that our common sense becomes our counsellor to look more steadily on our next stage of being, and to be doing whatever will most tend to make that safe and comfortable to us.

But when these feelings and thoughts really predominate in our mind, and occupy our attention in any proportion to their just claims upon us and to their insuppressible importance, then every year of added life brings with it the opportunity, the scene, the incitation, and the means of the further improvements which we need, and which will be so richly profitable to us hereafter, as we enlarge their amount. No one can live longer with these ideas and on these principles but he will have reason to perceive and to acknowledge that *every additional* year has been a paternal benefaction to him.

Such results will give longevity a utility and a charm which

will make it one of the greatest blessings we can receive. The parable of the "Talents" intimates that the greater improvements we acquire and use in this life, the grander will be the benediction conferred in the next.*

LETTER XXVII.

Inquiry into the State of the Mind at the Time of our Earthly Death.—And on the Indications then given of the Immortality of its Nature.—Illustrative Incidents from the Dying Moments of many Persons more or less distinguished.

My dear Son,

Considering our vital and intellectual self the spirit which feels and thinks in all that we are conscious of, which acts in all that we do, and which constitutes our individualized personality, to be an immortal principle of being—we may expect not only that longevity should not impair or diminish it, but that death should also be unable to destroy it. Death must be only a medium to a new scene of life, as birth visibly is. It will be congruous with the eternal durability of our nature, that, both in the commencement of its entrance into its earthly drama, and at its exit in the last scene of its appearance, it should give some tokens of its imperishable essence, and indicate that it is itself independent of the approaching mortality of its united but temporary body.

To ascertain what is true on this interesting point, I have examined the state of individual minds as their last moments approached, as it has been described, to see what information could be drawn from it that would illustrate the inquiry; and I will submit to your consideration some of the most remark-

* You will be gratified by a passage in Sir Humphrey Davy's letter to one of his early home friends. "We can trace back our existence almost to a point. Former time presents us with trains of thoughts gradually diminishing to nothing. But our ideas of futurity are perpetually expanding. Our desires and our hopes, even when modified by our fears, seem to grasp at immensity. This alone would be sufficient to prove the PROGRESSIVENESS of our nature; and that this little earth is but a point, from which we start towards a perfection that is bounded only by infinity."—Dr. Davy's Memoirs of his Brother, vol. i., p. 130.

able of those which have been delineated to us with sufficient minuteness.

My first point of investigation has been to know whether the dying individual has a perception or a feeling that he is departing from us; and from what I have read and heard, it appears to me that, in general, however near death is, he has no sensation or belief that it is so; but that, even when he thinks he is in that state, it is an inference of his judgment, and not a feeling in his intellectual nature. This result corresponds with the soul's essential immortality, and is a testimony to it. Being an undying principle of life, it never feels itself to be actually extinguishing; but, on the contrary, when all its friends have given up every hope of its surviving longer, the dying person does not think he will die, but has the hope of recovery till all visible sensibility and life have ceased. I have seen this on deathbeds which I have attended, and I believe it is a common fact in those whose disease is consumption, that they are sanguine of their restoration to the last.

Mr. Gibbon exhibited this undying feeling of his mind at the time that the agency of death was upon him; and the day before it closed his earthly life, he expressed his belief that he should enjoy it many years more.*

Mr. Pitt expired on the 23d of January, 1806, in his forty-seventh year, on the anniversary of the day on which, twenty-five years before, he had become a member of the British Parliament. He went to Bath for relief when his fatal illness came upon him, and returning to Putney Hill, wrote to the Marquis of Wellesley a letter expressing his belief that he was recovering.† He received his noble friend with the en-

* Lord Sheffield left him on the afternoon of the 14th January, 1794, and mentions that, on the next day, "at one o'clock, he received a visit of an hour from Madame de Sylvie; and at three, his friend Mr. Crawfurd called, and stayed with him till five o'clock. They talked, as usual, on various subjects: and twenty hours before his death, Mr. Gibbon happened to fall into a conversation with him on the probable duration of life. He said that he thought himself a good life for ten, twelve, or, perhaps, twenty years. About six he ate the wing of a chicken, and drank three glasses of Madeira." He died soon after noon on the following day.

Lord Sheffield adds—"The valet de chambre observed that Mr. Gibbon did not, at any time, show the least sign of alarm or apprehension of death; and it does not appear that he ever thought himself in danger." —Gibbon's Miscell. Works, vol. i., p. 422–5.

† The marquis has attached this note to his deeply interesting account

f a spirit that had no feeling of advancing death, al- his bodily appearance convinced the marquis that it ear.* He died in a few days after this letter and the ow. It is obvious from both, that Mr. Pitt felt as an tal being would feel, though his spirit was about to be ted from its body. He had that sensation of vitality animated Mr. Pope when he inferred from it his own uation of existence.†

er Cromwell, to his latest moments, had the same sensation of life, and would not believe that he was s departure, and expressed warmly his conviction of ety to his medical attendants, persuading himself that also a Divine sanction for his confidence.‡

Duke of York, our present sovereign's brother, in his illness, when all saw that he was dying, was so little us of being in that state from his internal impressions,

tt, printed in the "Quarterly Review," No. 114. "Putney Hill, January 12th, 1806.—My dear Wellesley—On my arrival here I received, with inexpressible pleasure, your most friendly and ate letter. If I was not strongly advised to keep out of London ve acquired a little more strength, I would have come up imme- for the purpose of seeing you at the first possible moment. As m afraid I must trust to your goodness to give me the satisfac- eeing you here the first hour you can spare for that purpose. I vering rather slowly from a series of stomach complaints, fol- y severe attacks of gout; *but I believe I am now in a way of ndment.*"

marquis says, "I was received by him with his usual kindness -humour. His spirits appeared to be as high as I had ever seen nd his understanding quite as vigorous and clear. But, not- ding Mr. Pitt's kindness and cheerfulness, *I saw that the hand was fixed upon him.*"—Ib., 491.

May, 1744, Mr. Pope evidently grew worse and more infirm. he said to Spence, I am so certain of the soul's being immortal, *em to feel it within me*, as it were, by intuition."—Dr. Wharton, s "Last Hours," p. 523.

ter making his will, the next morning early, Cromwell asked a hysician who had sat up with him why he looked so sad. swer was made that so it became any one who had the weighty s life and health upon him. 'Ye physicians,' said the protector, shall die. I tell you I shall not die this time; I am sure of it. ink I am mad: I speak the words of truth, upon surer grounds r Galen or Hippocrates furnish you with. God Almighty him- given that answer, not to my prayers alone, but to the prayers who entertain a stricter commerce and greater interest with him. erfully, banishing all sadness, and deal with me as you would rving man.'"—Sir H. Halford's "Deaths of Eminent Persons," n Dr. Bates's Elenchus. He died soon after, on 3d September, anniversary of his victory at Dunbar, aged fifty-nine

that, although apprized of the medical opinion, yet he thought that he was getting better.*

In some cases the sense and appearance of life become even stronger than usual as its union with the body is severing. This was the case with Bishop Hildesley, and I believe it is not uncommon.† Even many deranged persons recover their complete sanity as death advances upon them—a strong indication that such maladies are diseases of the functions of the frame, and not of the intellectual spirit, and a testimony of the distinctness and several natures of the soul and body.

That the mind retains and displays its full powers when the agency of death is decidedly operating to separate it from its body, just as a living and thinking spirit would do that was different from it, and only temporarily connected with it, we have abundant instances. I will only notice a few that happen to occur to me. Mr. Burke's only son died before his father; but in his dying hour manifested himself to be complete in his intellectual sensibilities and energies.‡ Mr. Fox also died

* He died 5th January, 1827. His last illness came upon him in the preceding summer. At the end of December his legs resumed the appearance of mortification, and he was informed of the fatal prospect. He confessed to Sir H. Taylor that he had not expected such an issue. "I am not afraid of dying; I trust I have done my duty; I have endeavoured to do so; I know that my faults have been many, but God is merciful; I bow with submission to his will. I have at least not to reproach myself with not having done all I could to avert this crisis, but I own it has come upon me by surprise. I knew that my case had not ceased to be free from danger; I have been always told so, but I did not suspect immediate danger." On the 28th, after taking the sacrament with the Princess Sophia, Sir Herbert says, "He asked me whether his physicians thought much worse of him, for he *really felt better*." It was not till the day before his death that he had the conviction of his approaching departure, when he said in a steady, firm tone of voice, "I am now dying." —Sir H. Taylor's Account.

† He died in 1772, aged seventy-four. "It is remarkable," says Mr. Moore, "that for *a fortnight before the bishop died*, he was apparently in better health and spirits than he had been for some months preceding."—Clissold, p. 526.

‡ "In June he was returned to parliament for Malton, and appointed Irish secretary to Earl Fitzwilliam; but consumption came rapidly upon him, and he died on the 2d August. On the morning of his death, the lamentations of his father and mother reached him where he lay. He rose from his bed, and desired his servants to support him towards the room where they were sitting in tears. He endeavoured to enter into a conversation with his father; but grief keeping Mr. Burke silent, the son said, 'I am under no terror; *I feel myself better, and in spirits; and* yet my heart flutters, I know not why. Pray talk to me, sir! talk *of religion*; talk of morality; talk, if you will, of indifferent subjects."

with his mental principle unimpaired.* So Addison, notwithstanding the infirmities of his frame under which he was sinking.† Mrs. Rowe, whose writings so much pleased our forefathers, was in all her vital power two hours before she was found dead ;‡ and the celebrated Boerhaave contemplated the perceptible difference between his mind and his body in his last illness as being like a philosophical experiment to him, that his intellectual self would not perish with his bodily dissolution.§ Our acute-minded Berkeley had no anticipating

"Then turning round, he exclaimed, 'What noise is that? Does it rain? No; it is the rustling of the wind through the trees;' and immediately, with a voice as clear as ever in his life, and with a more than common grace of action, he repeated, from Adam's morning hymn—

"'His praise, ye winds! that from four quarters blow,
Breathe soft or loud; and wave your tops, ye pines!
With every plant, in sign of worship, wave.'

"He began again, and again pronounced the lines with the same happiness of elocution and gesture, waved his hand in sign of worship, and, worshipping, sank into the arms of his parents as in a profound and sweet sleep"—dead.—Letter from Dr. Lawrence, dated Aug. 4, 1797.

* "Richard Wilson said, Fox's last words were, 'I die happy;' then looking at his wife, 'I pity you.' He retained his perfect judgment till within a quarter of an hour of his death. His mind then vacillated."—Mr. Green's Diary, in Gent. Mag., 1834, p. 477.

† Dr. Young has mentioned the circumstance, in his "Essay on Original Composition," of Addison. When he felt that life was departing, he sent for his lady's son, the Earl of Warwick, to his deathbed as his last opportunity of reclaiming him from his irregularities. The earl, with great kindness of manner, desired to hear his last counsels. "I have sent for you, my lord, that you may see in what peace a Christian can die," was Addison's last observation; expressing it in the completeness of his own mind in all its religious sentiments and belief.

‡ "She was sixty-three, and died 20th February, 1737. On the day on which she was seized by death, she seemed to those about her to be in perfect health and vigour, and in the evening, about eight o'clock, she conversed with a friend with all her wonted vivacity, after which she retired to her chamber. At about ten, her servant, hearing some noise in her mistress's chamber, ran instantly to it, and found her fallen off her chair on the floor, speechless, and in the agonies of death. She had the immediate assistance of a physician and surgeon, but she soon expired."—Dr. Gibbon's Account of her.

§ "Herman Boerhaave died in his seventieth year, 23d September, 1738. His fatal distemper, which began in the preceding year, was attended with periods of great pain and lowness of spirits. About three weeks before his death this great chymist, as he was sitting without door with his wife and family, was visited by a friend, to whom he mentioned that he had never doubted of the spiritual and immaterial nature of the soul. He stated that he had lately had a kind of experimental certainty of the distinction between corporeal and thinking subjects, which mere reason and philosophy cannot afford. He had had opportunities of contemplating the wonderful and inexplicable union of

sensation that death was coming upon him;* nor the daughter of Bishop Lowth, whose spirit fled unexpectedly in a social party.† All sudden deaths accruing in the full enjoyment of mind seem to confirm the idea that the soul is unconscious of the impending change, because its own nature is unaffected by it; for although such events occur like an instantaneous blow, yet they seem not to be, except in the sudden rupture of a vessel, a suddenly produced effect. They appear to be but the last step in a progression of morbific causes, whose operations ought to appear in corresponding changes of the soul, if that was but the result of its bodily composition. In this case I should expect the mind to tes-

soul and body, which nothing but long sickness could give. He illustrated this by describing the effects which the infirmities of his body had upon his faculties; yet they never did so oppress or overpower these but that his soul was always master of itself, and always resigned to the pleasure of its Maker. As death approached nearer, he seemed even less sensible of pain, and more cheerful under his torments, which continued till he expired his last breath."—Dr. Johnson's Account of him.

* "On Sunday evening, 14th January, 1753, he was with his family, listening to a sermon of Dr. Sherlock's, which his lady was reading to him. He then lay on his couch, and seemed to be asleep, till his daughter, presenting him with a cup of tea, first perceived that he was insensible. Some affection of the heart had seized him, and he expired while his wife was reading to him St. Paul's chapter on the resurrection, on which he made some comment."—Biog. Brit. Of him Bishop Atterbury said, "that he did not think so much understanding, so much knowledge, so much innocence, and so much humility had been the portion of any but angels until he saw Mr. Berkeley."

† "His second daughter, Frances, died as she was presiding at the teatable. She was going to place a cup of coffee on the salver. 'Take this,' said she, 'to the Bishop of Bristol.' Immediately the cup and her hand fell together upon the salver, and she instantly expired."—Chalmers's Biog. The bishop lost his eldest daughter at thirteen, and placed upon her mausoleum an interesting epitaph. His own Latin is more tender than Mr. Duncombe's translation.

"Cara! vale! ingenio præstans, pietate, pudore;
Et, plusquam natæ nomine cara, vale!
Cara Maria! vale! at veniet felicius ævum,
Quando, iterum, tecum, sim modo dignus, ero.
'Cara! redi,' læta tum dicam voce, 'paternos,
Eja, age in amplexus; Cara Mari! redi!'"

"Dearer than daughter! paralleled by few
In genius, goodness, modesty—adieu!
Adieu, Maria! till that day more bless'd,
When, if deserving, I with thee shall rest
'Come,' then thy sire will cry, in joyful strain,
'Oh! come to my paternal arms again!'"

Rev. H. Cliffold's "Last Hours," p. 432.

tify every change and advance to death which the body undergoes, as the thermometer indicates every increment or alteration of the temperature. Nor can I reconcile with such an hypothesis the phenomenon of Dr. Maclaine being able, as the mortal agency advanced upon him, so steadily to survey it and the prospect that extended beyond it, and so intelligently to compare and reason upon them.* This was quite natural to a soul that was only passing from one scene of being to another, but would be unnatural, and, in my apprehension, impossible, to a soul that was on the point of perishing for ever with the cessation of the pulmonary respiration of its connected frame.

Hence, when I find the individual in his mortal hour acting with his usual taste and peculiar powers, as Haydn, enjoying his musical harmonies;† or like Bishop Porteous, displaying

* He died at eighty-two, in November, 1804. He had been, for fifty years, the minister of the English Church at the Hague. In his last illness he said, "I feel that I am going very gradually; I shall not long be here; I have always had a religious turn of mind, which has kept me from bad habits. When very young I was fond of attending places of worship, and of going to funerals, being impressed with the solemnity of the service.

"I have no pain, and though very weak, and daily becoming more and more so, yet the faculties of my mind are in a better state than they were two months ago. I can now contemplate clearly the grand scene which I am going. It appears to my mind very magnificent and very awful; all is bright, though I say it with humble confidence and reliance on the Divine mercy, through the mediation of my blessed Redeemer, whom I have always loved too much to fear that he should now forsake me. I think almost continually of the sublime objects in the new scene that is before me, of the society that I shall join in that untried state, and I feel the subject very awful; but it is a pleasing awe, accompanied with the highest reverence and trust in a heavenly Father."—Mr. Simpson's Account. Clissold, p. 456.

† Haydn died in May, 1809, about seventy-seven. When Napoleon attacked Vienna on 11th May, the French fired 1500 cannon shot within a few yards of his house upon the Austrian capital. Four bombs fell close to his house. He was carried to his bed with a convulsive shivering. On 25th May his strength diminished sensibly; yet he caused himself to be carried to his pianoforte, and sang three times, as loud as he was able, 'God preserve the Emperor.' While at the piano he fell into a state of insensibility, and at last expired."—Baubet's Account, cited by Clissold, p. 538.

"It is interesting to know, that he said of his greatest musical composition, 'When I was employed upon the "Creation," I felt myself so penetrated with religious feeling, that before I sat down to the pianoforte, I fell on my knees, to address myself to God with earnestness that he would enable me to praise him worthily.'"—Ib.

his mental sensibilities a few hours before he expired;* or like Lord Mansfield, regarding the transfer of his existence as but a journey to another station of it;† or like Lady Glenorchy, feeling death not only to be an easy change, but causing pleasure to her as it approached‡—all such facts are congruous with the nature and thoughts of an immortal principle, but would be inconsistent with any other, and could not accrue to it. That age should feel like youth, as in Dr. Reid, who was so distinguished as a metaphysician, suits a soul that, being eternal, can have no age and no decay; but is the reverse of what should occur to the more temporary material life of a decaying body.§

Another very impressive indication of the independent nature of the soul, and of its unextinguishability by the operations of mortal death, arises to us from the unvaried preservation in every one of the individual character of his living personality to the last moment of his disappearance, and his manifestation of it in his ideas and expressions, as long as he can move his vocal organs to utter anything. This is what

* On 11th May, 1808, the prelate, then seventy-seven, "was at his own desire removed to Fulham; and, for a short time, the change of air and scene appeared to cheer and exhilarate him. As he sat the next morning in his library, near the window, the brightness of a fine spring day called up a transient glow into his countenance, and he several times exclaimed, 'Oh! that glorious sun.' Afterward, while sitting at dinner, he was seized with some slight convulsions, which were happily of short duration; and he then fell, as it seemed, into a gentle sleep. From that time he never spoke, and scarcely could be said to move. Without a pang or a sigh, by a transition so easy as only to be known by a pressure of his hand on the knee of his servant, who was sitting near him, his spirit fled to the realms of peace."—Dr. Hodgson.

† He died in 1793, in his eighty-ninth year. Being recovered by medical attentions from a state of insensibility, he said to Dr. Turton, "Why did you endeavour to bring me back, when I was so far gone on my journey."—Holiday's "Life of Lord Mansfield."

‡ She died in 1786, at forty-three. She frequently mentioned her persuasion that her death was near, and she uniformly expressed her satisfaction and joy at the prospect. Her conversation was nevertheless as easy, pleasant, and cheerful as ever; almost her last words were, "If this be dying, it is the easiest thing imaginable."—Clissold's Last Hours, p. 529.

§ Dr. Reid died at eighty-seven, on 7th October, 1796. Dugald Stewart says of him, "His ardour for knowledge remained unextinguished to the last, and, when cherished by the society of the young and of the inquisitive, seemed even to increase with his years. What is still more remarkable, he retained, in extreme old age, all the sympathetic tenderness and all the moral sensibility of youth. In apparent soundness and activity of body, he resembled a man of sixty more than of eighty-seven."

é calls the ruling passion strong in death, and of which he s some instances sketched from realities.* What the in- dual mind is and has been in his particular character, and ing, and habits, he is when he expires. But every one some diversities in his moral and mental personality; and hese are those which his always continuing soul has ac- ed and retained, they always accompany it—always, in th as in life. Each lives with this self-identity, which ks and distinguishes him from all others, and which con- ates his individual mind; and each dies with it, undimin- d and unseparating. We die with it as we fall asleep h it. We shall at first rise with it from the grave, as we te with it from our night repose. It runs not, like min- g streams or streaks, into others, lost in any general uni- ity. It changes not, like the chameleon, from one colour denly to another, nor, like the kaleidoscope, shifts from form to others on every agitation. As soon as youth ad- es into manhood, you see a one-individual character grad- y forming and fixing its features, and steadily retaining n; enlarging, but not losing them, whatever number of s it may appear in the living body. Hence, if we have thousand millions of contemporary fellow-creatures on our h, there are as many of these distinct, and peculiar, and rsified individualities—not the mere visible phenomena of instant, as the coloured rays on the spectrum, moving and ring into each other as we turn the prism, but abiding per- ently within us, sleeping, waking, talking, walking, and ng in us. Whether we are in business or in amusement, ome or abroad, resting or travelling, in ships, armies, s, villages, or cities, still this self-identity, this continuous

* "Odious! in woollen! 'twould a saint provoke!"
Were the last words that poor Narcissa spoke.
"No: let a charming chints and Brussels lace
Wrap my cold limbs and shade my lifeless face.
One need not, sure, be frightful, though one's dead,
And, Betty, give my cheek a little red."

"I give and I devise," old Euclio said,
And sigh'd, "my lands and tenements to Ned."
"Your money, sir?" "My money, sir, what, all!
Why, if I must," then wept, "I give to Paul."
"The manor, sir?" "The manor! hold!" he cried,
"Not that—I cannot part with that"—and died.
Pope's Ep. 1.

mental peculiarity, this individual personality, is in and wi every one of us, indestructible and indelible even by ourse Napoleon, wherever he went and whatever he did, was st Napoleon, and no one else, and no other was Napoleon b himself; the same with Lord Nelson, Mr. Pitt, Mr. Fox, an every other character of the day.*

The notes of the deaths of three men are before me, whic confirm these observations by showing the distinct individua ness of character and mind fully subsisting, but manifestin itself as various as their personal spirit had become, from i habits and employment during their respective lives. The were Mirabeau, the first great leader of the French Revol tion, Cardinal Mazarin, and Thomas Paine.

In MIRABEAU we see the mistaken opinions into which h had settled his mind, and his ruling passion—the love of bein distinguished from others acting strongly upon him to the las or, at least, presenting to us a peculiar intellect, displayin itself quite different from its dying body. In 1791 he wa suddenly seized with his mortal attack, in the highest tide o his political glory.

"His last effort, when his speech failed him, was to write on his table 'Death is but a sleep,' and a request for some opium to extinguish bo his life and pains together. He added, 'Take away from my sight a those funeral-looking things. Why should a man be surrounded by th grave before his time? Give me flowers; let me have essences; a range my dress; let me hear music; let me close my eyes in harmony But this passed away with the return of pain; and he once more eagerl required opium to end the struggle. The physician, to quiet his min gave him some water in a cup, telling him that it was opium. He swa lowed it, dropped back upon his pillow, and was dead."†

Cardinal MAZARIN exhibited, in the last scenes of his ambi tious and successful life, a personality of mind as appropriat

* In all that Lord Nelson said after he had received his death-wound i the battle of Trafalgar, we see his peculiar mind in all its feelings, cha acter, and ideas, in action to the last. His practical judgment, knowl edge, and decision were as manifest in his latest word as in all his plan and orders for the battle. When the hostile ships had struck their flags and the ocean was agitating into tempestuous waves, his dying order o advice for the fleet, expressed to his captain, was, "Anchor, Hardy anchor!" This single term displayed the full action and intellectuality of his superior mind at the moment of his departure. I understood a the time from nautical men, that it was so right, that, if what he recom mended had been done, more of the prizes would have been secured an saved.

† Blackwood's Magazine, 1834, p. 63. How like, in one point, Pope's Narcissa.

only to himself, and marking an individual spirit quite unlike the result of a mere general organization of the common material particles of a human body. We have the following account of him from his contemporary, the Count de Brienne :—

Cardinal Mazarin was taken ill on his return from the conclusion of the peace of the Pyrenees, which crowned his glory as a diplomatist and minister. Arrived at the Louvre in a dying state, he ordered a grand ballet to be prepared in the Galerie des Rois, with all the splendour which paint, drapery, and gilding could bestow. The decorations of the Louvre took fire.

The Count de Brienne says, "Upon the alarm of fire I ran to the apartments of the cardinal, and found him in the arms of the captain of the guards, pale and trembling, with death in his looks. A consultation was held, and the physician, Granaud, said, 'I must not flatter you, monseigneur; medicine cannot cure you.' 'How long have I to live, then?' 'Two months, at the most.'" After this Brienne adds, "One day, while in his gallery of painting, sculpture, and tapestry, I heard him coming, and concealed myself. He entered with a languid step, and stopping frequently, as he came to different pictures, he mournfully cried, 'I must leave this, and this, and this, and all these, which have *cost me so much*. I am going where I shall no longer see them.' I could not help sighing," continues Brienne. "'Who is there, who is there?' said, he, in a doleful tone. I came forward, and beheld him in his nightgown, nightcap, and slippers, with death in his countenance. 'It is I, monsieur, with a letter for you.' 'Come here, my friend—I am faint—look—that beautiful Correggio, that Venus of Titian, that incomparable Deluge of Annibal Carraccio!—ah! I must leave all these. Adieu! beloved pictures! which I loved so much, for which I paid so much.' A day or two before his death he had himself shaved and dressed, his mustaches curled, his cheek and lips covered with vermilion, and white paint laid on with equal abundance. Thus made up, and placed in his sedan chair, left open in front, he made the tour of his garden."*

In the last moments of THOMAS PAINE we have again another mental personality, as unlike the others as two dissimilar things can well be, exhibiting its intellectual self and its own peculiarity to the last, and therefore such as a soul, independent of its body, would be, but not what an arrangement of common matter only could have exhibited. He has been portrayed to us as he lived and died at New-York, on his last emigration to America, by Grant Thorburn, who visited him there—the original character from whom Mr. Galt composed his interesting narrative of "Lawrie Todd." We have two sketches of him before his dying scene; Grant Thorburn thus describes his bodily appearance—

* Count de Brienne's Memoirs inédites, cited in the British and Foreign Review, *No. 4, p. 405.*

"He was the most disgusting human being you could meet with in the streets. Through the effect of intemperance, his countenance was bloated beyond description."

He has been delineated by others to the same purport, and from the same cause—a persevering and excessive use of spirituous liquors. Mr. Thorburn went to him in his lodgings, and in the conversation said to him—

"'Here you sit, in an obscure, uncomfortable dwelling, powdered with snuff and stupified with brandy. You, who were the companion of Washington, Jay, and Hamilton, are now deserted by every good man; and even respectable Deists cross the streets to avoid you.' He answered, that he cared not a straw for the opinions of the world. I replied, 'I envy not your feelings,' and so we parted."

In a further conversation, Mr. Thorburn described to him his own course of a regulated and industrious life, as a plain man of humble condition—

"'I went to church, and put two cents into the plate. If the preacher was lively, I heard him. If he were sleepy, I slept too. At any rate, I rested my body, and rose on Monday morning refreshed for my work, while others spent their money, and on the Monday rose with the headache, unable to work. Now,' I said, 'you see it was by keeping the Lord's day that I came to be a seedsman.' I added, 'That whatever religion might do for us in the next world, it was the most profitable concern a man could follow in this.' He looked earnestly in my face, and said he believed I was right."*

Mr. Thorburn describes his last moments, from the information of the medical gentleman who attended him—

"It is not true that he recanted his free-thinking principles on his deathbed. His physician, a man of good standing and respectability, informed me, that in the same hour that Mr. Paine died he was in the room.

"Mr. Paine's complaint was excruciating, and ever, as the convulsion returned, he would exclaim, 'Lord! help! Lord! help! Lord Jesus! help!' He had then a few minutes' respite from the pains. The doctor stood by his bed; says he, 'Mr. Paine! you have published to the world, and we all know your sentiments on that subject. I ask you now, as a man who will be in eternity before one hour, Am I to understand you as really calling on the Lord Jesus for help?' *He thought for about one minute*, and then replied, '*I don't wish to believe* on that man.'

"These were his *last words*, for in twenty minutes thereafter he died."†

* Grant Thorburn's "Forty Years' Residence in America." This volume describes his gradual advance, by steady conduct and industry, from an immigrant without means to a respectable competency.

† Grant Thorb., ib. I cannot but regret that the physician put the delicate question so roughly to him, in a manner so calculated to rouse the false shame of human pride and exasperating self-reproach, instead of

The same tokens of an individual identity of living mind, peculiar to itself, with intellectual tastes and feelings belonging to itself, and like nothing which mere nervous pulp of brain and fibre, similar in all, could display, appears in numerous instances; in the calm anticipation of his own death, and considering foresight for another's comfort, which appeared in Mr. Crabbe the poet;* in the indulgence and expression of a favourite taste in two obscurer persons;† in the effect on a dying mind, in extreme suffering, of a musical strain—a finely intellectual agency.‡

soothing him to an increase of the better feelings which were beginning to rise within him. Yet the reply, wrung, as it were, from him, rather implied a dread of believing than a positive disbelief—'I don't WISH to believe.'" How much a false shame, a fear of human taunt, actuates many in their most critical moments, we have an instance in Thistlewood, who was executed in our own times for high treason.

"When he was on the scaffold, his demeanour was that of a man who was resolved to meet boldly the fate he had deserved. He observed to his fellow-criminals, that the grand question whether or not the soul was immortal would soon be solved for him. No expression of hope escaped him; no breathing of repentance; no spark of grace appeared: yet, on the night after his sentence and preceding his execution, *while he supposed that the person appointed to watch him was asleep*, he was seen by that person repeatedly to fall upon his knees, and was heard repeatedly calling upon Christ his Saviour to have mercy upon him, and to forgive him his sins."—The Doctor, vol. ii., p. 304.

What could more show a thinking soul, different from the body, than both these kinds of conduct—the penitent and the bravado?

* Mr. Crabbe died 8th February, 1832, in his seventy-eighth year. "He was only one week ill. On the night before he died he said to a maidservant who had lived long with him, 'Now, in the morning, when I am dead, go you to bed, and let others do what must be done; but while I am living stay you beside me.'"—Am. Biog. for 1832, p. 32.

† Mr. Green, in his "Diary," mentions, that "Dewthwaite's last words were, 'Raise me up a little, that I may see again that sweet pine;' a favourite tree he had planted." The editor of the "Gentleman's Magazine" adds to this: "Last summer, the editor called on a gentleman in the neighbourhood of London, in whose garden were some large and beautiful specimens of exotic trees. The owner was then in a deep decline, and seldom rose from his bed. His gardener mentioned, that on the afternoon of the preceding Sunday, he had desired to be dressed, and placed in a chair near the window, that he might sit and see his beautiful salisburia, which grew near the house, and which *his father had planted.*"—Gent. Mag., 1834, p. 20. Here are filial feelings and recollections, and an intellectual sensibility to a natural beauty, inexplicable without supposing a personal and continued mind.

‡ In Captain Owen's voyage to the coast of South Africa, when in Delagoa Bay, he mentions, "Captain Lechmere, of the Royal Navy, came from the observatory in a low fever, and during the night was so ill that he was not expected to survive till the morning. He became de-

This universal phenomenon of a continued individualizing identity of mind appearing in every one, peculiar to himself, beginning with his earliest consciousness, enlarging in its ideas and feelings the longer he lives, and constituting, from time to time, and at all times, his moral and intellectual nature, character, thought, feelings, hopes, wishes, judgment, knowledge, will, resolution, and habits, which distinguishes every one of us from each other, is not accounted for by, or reconcileable with, the supposition that we are but bodily particles; that there is no continuing principle of life and intelligence within our material compound of these particles. They are in direct contradiction to it; they disprove such an hypothesis every day and year that each individual lives. If we were nothing but the body, our minds and personal characters would be as similar to each other as our flesh, our blood, our bones, our systems of respiration, digestion, secretion, and circulation, our nervous and cerebral substance, visibly and confessedly are. Intellectual uniformity or identity would be the individual phenomenon of human nature everywhere, and not intellectual diversity and distinct personality.

Nor could this mental individualization continue so steadily through life, as it does in every one, if it were not that of a one and the same abiding and continuous living principle; for all the particles of its bodily substance are every moment passing from it, and new ones are as constantly accruing. Our need of food every day arises from this continual separation and transpiration of the bodily matter of our frames. We see this fact by the shrinking, and extenuation, and loss of substance in those who are famished, and cannot get the food which supplies the bodily want. Such a continual mutation of the body is inconsistent with the abiding energy and sameness of the mind. I feel myself, in my sixty-ninth year, to be what I was in my ninth, with the addition of what

lirious. Every means were tried to calm him in vain. The same impatient, painful restlessness prevailed. Captain Owen, knowing from experience that singing soothes extreme pain, commenced that pathetic ballad, 'Here a sheer hulk lies poor Tom Bowling.' The first note produced a cessation of his phrensy. From raving madness he sank into almost total insensibility, which continued until Captain Owen came to the words, 'His soul is gone aloft;' when a long guttural sound announced that his spirit was fled."—Owen's Voy., vol. i., p. 129. Here was mind excited by the tones to subdue the vascular action of the function that was deranging it, and then releasing itself from its bodily frame.

I have since acquired. I remember my ideas and feelings then, as well as those of others who were at that time about me. I was not what they were then, but I am now what I was in all the mental and moral features which I can recollect to have had at that early age. I can trace, in distinct recollection, the same personal individuality of self-identity, the same outline of character, continuing as new incidents and ideas accrued, adding to it new means, and materials, and improvements, but not altering its essential sameness. Yet, at every period, I was still only myself, and not what others were, nor were they what I was, nor could we be confounded with each other, nor transformed into each other; and yet the carbon, the oxygen, the azote, the calcareous earth, the hydrogen, and all the other material elements of which my frame was composed, were precisely the same as the same substances in theirs. The differences of each person's character and personality, therefore, lie wholly in his vital and thinking principle, in his acquiring, perceiving, reasoning, and continuing soul. This, existing before his body was made, acted in forming that, and in investing itself with the organizations which it was appointed to have in its human body. It was made to pass its human life within such a frame, and to be transferred by death from that when the will of its Maker intends the separation and emigration of it to take place. Every person may find an experiment in himself on this subject, if he will recollect what he was and has continued to be, and that he has been one and the same being through all his stages.

Several facts seem to warrant and to ground these remarks. When Hannibal was taken by his father Hamilcar to the altar of his gods, and there made, at the age of nine, to swear eternal enmity against the Romans, the spirit of the body, excited to this feeling, carried it on, undiminished and unaltered, to the end of his life. This could be done only by the same spirit continuing permanently within his changing material frame.*

* Hannibal, relating this influential event to the King Antiochus, told him, that "when his father was offering sacrifice to Jupiter, just before his departure into Spain, he, being then but nine years old, stood near him at the altar. When the libations and other rites were ended, Hamilcar, having commanded the rest to retire, called him up to him, caressed, and asked him if he would attend him to the army. Cheerfully consenting to this, and requesting that he might go with the eagerness

All the sublime feelings, hopes, and aspirations which have accompanied so many enlightened and pious Christians to their last sigh, indicate, with an impressive certainty, their interior feeling of the undying nature of the departing spirit, and exactly suit a being whose life the mortal death will not extinguish, and appear to be incompatible with any other character of it. I do not see how we can have stronger demonstrations of this its unperishing quality, than all these circumstances—each varying, yet all leading to the same conclusion—even considering them only as so many natural and experimental phenomena on this point, as a mere psychological question.

An immortal soul would thus feel, think, and act, as its links with its bodily compound were separating; but not a nameless thing, which was nothing else but its material particles and aerial fluids. The facts suit what we believe to be the truth, but are not suited to the erroneous supposition. Dr. Beattie's death is an illustration of this remark;* Mr. Halyburton's feelings, at that time, seemed to him a proof of his immortality.†

The extreme pain which some suffer in this separation of soul and body which death effectuates, leads us to the same conclusion, because it proves that an intellectual personality retains its acute and full sensitivity to the last moment. It feels often, with terrible agony, in the very gripe of death.

natural to children, his father led him to the altar, and commanded him to touch the victims, and to swear that he would never be in friendship with the Romans."—Polybius's Hist., l. 3, ch. 1.

* In June, 1776, this eminent physician was seized with a paralytic stroke, which proved fatal. The night he expired, conversing with the lad his servant who was attending him, he said to him, "Young man, you have heard, no doubt, how great are the terrors of death. This night will probably afford you some experience: may you learn and may you profit by the example, that a conscientious endeavour to perform his duty through life will ever close a Christian's eyes with comfort and tranquillity!"—Chalmers's Biography.

† The Rev. Th. Halyburton died in 1712, about thirty-eight. As the event was advancing, he said to a clergyman near him, "I think, brother, my case is a pretty fair demonstration of the immortality of the soul. If ever I was distinct in my judgment and memory in my life, it was since he laid his hands upon me. My bones are rising through my skin. I am now a witness for the reality of religion. This body is going away to corruption, and yet my intellectuals are so lively, that I cannot say there is the least alteration, the least decay of my judgment or memory." He repeated, that the vigour of his mind, and the lively actings of his *spirit* after God and Divine things, when his body was so low and *pained*, were a demonstration to him of the soul's immortality.—*Memoirs of* Professor Hamilton, Edin., 1715.

Mr. Canning died in agonies of this sort. As the destructive inflammation increased upon him, his shrieks were heard even in the street, as I was informed at the time. This again corresponds with the undying nature of the soul; that, as such, must feel pain when the causes of pain act upon it, as much in its dying as in its vigorous hour, but not that which has no existence as a personality; no self-identity, no continued being, but a mere succession of the results of a material arrangement. Thus, both the pleasure and the pain which are felt, as death is parting the union between our soul and its corporeal mechanism, attest its immortality as forcibly as the activities, feelings, thoughts, and aspirations at that termination of our earthly association.

That the separation and departure of the soul are involved in mystery which we cannot elucidate, arises from its invisibility. What we cannot see or feel, we cannot describe. The decomposition of the body is the only certain evidence to us that the principle of life has left it, and this is decisive to prove that the soul has left it; because it is a remarkable fact, that, as long as life is in the body, its dissolution cannot take place. The vital energy resists all the decomposing effects of the natural agencies which surround us, as long as it is within our frame; but, from the moment of its departure from it, the dissolving causes, whose action the principle of life had suspended while within the body, begin immediately to operate destructively upon it.

At what time the animating spirit quits its material organization we have no certain knowledge. The last gasping of the breath, or the ultimate sigh, seems like the separation where they take place; but in many these are imperceptible. Two circumstances induce me to think that the total cessation of all functional action and insensibility, which are usually deemed and usually are the actual death, may not also be the emancipation of the spirit. One is the unexpected resuscitation of some in their coffins, after every mark of a certain demise, which proved that the soul was lingering within, notwithstanding the apparent death.* The other fact is the restoration to life, a very rare incident, yet which has occasionally

* I remember my father showing me in the street a man to whom this had happened. He had a violent asthmatic cough after his recovery, which was shaking him when I saw him, and which was ascribed to his being laid out and in his coffin for some days in very severe weather.

occurred, of a criminal who had been hanged for the appointed time, and who seemed to be a lifeless corpse.* In both these kinds of cases the soul loses wholly for a time its consciousness, and all its power over its bodily senses, and yet has not, therefore, left its bodily tenement. The precise moment of the spirit's leaving its body is therefore as little known as the exact time of its uniting with it. Birth and death are alike mysterious and inscrutable. Pain from earthly cause appears to cease entirely when the latter has completed its agency; but we have reason to believe that pain is felt by the forming being even before its human nativity.†

I will add a short statement of three more deaths of distinguished persons, which concur with those before mentioned to show such a possession and action of their intellectual principle of life as mark it to be a personal being different from its body, or at least as thinking and acting precisely as if it were so.

GENERAL WASHINGTON.—"He died 14th December, 1799, in his sixty-eighth year. On the day before, while attending to some improvements on his estate, his neck and hair became wet from a slight rain. At night, an inflammatory affection of his windpipe came on, succeeded by fever and a laborious respiration. He was bled in the night, and in the morning three physicians attended him; but before midnight, and in about thirty-five hours from the time that he was in his usual health, he expired, without a struggle, and in the perfect use of his reason.

"After the attack had come on, he thought it would be fatal. He submitted to the prescriptions of his physicians; but after a trial of their remedies, he expressed a wish that he might be permitted to die without further interruption; after his power of deglutition was gone, he undressed himself and went to bed, to die there. To his friend and physician, Dr. Creik, he said, 'I am dying, and have been dying for some time; but I am not afraid to die.' His biographer, Ramsay, adds, that he submitted to the issue 'with the dignity of a man, the calmness of a

* Mr. Green, in his "Diary," has noted an individual's feelings to whom this kind of death was beginning:—"1805. August 3d. Walked with Fesin round the Gave. Fesin said a friend of his had inquired of a person who had been turned off, and cut down on a reprieve, what his sensations had been. He answered, 'That the preparations were dreadful beyond all expression. On being dropped, he found himself amidst fields and rivers of blood, which gradually acquired a greenish tinge, and imagined that, if he could reach a certain spot in the same, he should be easy. He struggled forcibly to attain this, and felt no more.'"—Gent. Mag., 1834, p. 475.

† This inference is made from the uncommon circumstance related in 1709 by Dr. Derham, from his own examination, to the Royal Society, and printed in its "Transactions." "The child cried almost every day for six weeks before delivery, and so loud that it could be heard in the next room."—Phil. Trans, 1709, vol. xxvi., p. 495.

philosopher, and the resignation and confidence of a Christian.'"—Cliesold, 532.

Dr. PARR, 6th March, 1833, aged seventy-eight. "He was to the last serene and placid; calmly, even cheerfully resigned. Even in his last hours it seemed to be still his delight, as it had been in his previous life, to range through the whole compass of the rational creation, embracing, within his kindest thoughts and wishes, all human beings; and interesting himself in every event, in every part of the world, which wore a favourable aspect towards human improvement and human happiness. He gave minute directions respecting his funeral."—Ib., 544.

HALLER, so distinguished for his anatomical writings and science, died 12th December, 1777, aged sixty-nine. "But a few days before his death he employed himself in his favourite occupation of retouching his works. In the midst of his great sufferings he put the finishing hand to his physiology. In his last moments he employed himself in marking the decay of his organs. He felt his pulse from time to time, till he said to his physician, with great tranquillity, 'My friend, the artery no longer beats;' and immediately expired."—Mem. of Haller, Chalmers's Biog.

Mr. Malthus is an instance of death advancing on the body without the intellectual nature having the least consciousness or feeling that such a catastrophe was approaching. His mind had no perception of the mortal change which his bodily functions were undergoing, nor altered as their fatal action was preparing. The account of it was: Mr. Malthus died at Bath on the 29th December, 1834. "He had just entered his seventieth year, but was in the full enjoyment of all his faculties, and his death was totally unexpected by his friends. He left London about three weeks ago, on a visit to his father-in-law, at Bath, in good spirits, and apparently in strong health, anticipating a cheerful Christmas with his children and other members of his family invited to meet him. But he was taken ill soon after his arrival with a disorder of the heart, which in a few days hurried him to the grave."—Athen., 10th Jan., 1835.

LETTER XXVIII.

Mankind have been created on the Principle that Subsistence should be essential to them.—Instances showing that this was not an indispensable Condition of Human existence.—But, having been made the Law of it, we may be certain always of a sufficient Supply.

MY DEAR SYDNEY,

Having endeavoured to lay before you the principal facts and laws which concern our population, and the birth, life, and death through which it passes, as elucidating the Divine plans and purposes which have hitherto been pursued and effectuated in them, we will now proceed to consider the

system which has been devised and established for the SUBSISTENCE of those who thus come into being in our world.

Our bodies have been so composed in their substance and so constructed in their frame as to require this subsistence, as an indispensable condition of their existence, in the manner in which mankind have ever lived. They might have been otherwise made, but they have not. The original design of their Creator was, that food should be as necessary to them as air and warmth. He chose to subject them to this necessity, and so arranged their frame as purposely to compel them to seek and use the things external to them, which they would find on the earth, in order to exist upon it.

But these external things could not originate from mankind, because they cannot create them. He who made them could alone cause this provision to coexist with them, according to his primeval plan of creation. He therefore imposed upon himself the necessity of accompanying the earthly life of his human race with a continual and sufficient supply of the exterior aliment, which he thus made voluntarily and designedly indispensable to them when he created mankind. He therefore spontaneously, of his own free choice, undertook to create also the subsistence for them which they would, from his selected mode of framing them, perpetually require.

But he did not choose to create at once the millions of human beings whom he designed to constitute his earthly population. He did not bid tribes and nations spring up from the earth, as he commanded all the vegetables to arise from it. He preferred to adopt the plan of making only two human beings in his first paradise, and of preserving only six young parents after his diluvian revolution, with the law of such a gradual series and multiplication of offspring from them, in successive generations, as would place upon the globe, from age to age, such quantities of the human race as he meant to inhabit it. He therefore formed his scheme of mankind on the express plan that they should be always multiplying in continual reproductions; that every one should require a competent supply of daily food in order to keep alive; and that, as this must originate also from him, he would provide it adequately for them as long as he should choose that they should continue living beings on this earth.

This is the simple and correct state of the case. His system of creation made the due provision of subsistence, from

the external nature in which he stationed his human beings, an essential part of his plan of human beings, and of their life on earth as perpetually multiplying beings. By such a plan he voluntarily imposed upon himself the necessity to make it a perpetual law in such a creation, that sufficient food should always arise to the populations that would exist, and for that purpose should increase as they did, and be always in a concurrent ratio, and never in a contradictory one.

There is no speculation in these ideas; they are the natural conclusions of our reason on such a subject. Our Creator chose to make us so that we cannot exist without our food. To suppose that he did not also intend us to have it would be absurd; but as we are not the creators of it, we could have it only from him. He must, then, create the provisions for us which he has framed us to need, or he would defeat his own purpose, and prevent that human race from arising whom he desired to perpetuate. No deduction of science, therefore, seems to be clearer than the certainty that the subsistence of mankind has been, is, and always will be, carefully superintended and competently provided, in the course and system of created nature, in due proportion to the numbers in which they are living on the earth.

I put this plainly before you as an irresistible inference, which should be fixed as the standard principle of your mind on this much mistaken subject. He who created us to live, and to multiply, and to need continual food, must have made the system of the one as certain in its operation as the system of the other. External nature has therefore been so constituted, as well as our frame, that the subsistence shall be as assuredly and as constantly supplied by the laws and agencies of nature which relate to us, as by those which concern our body it is perpetually required. No other conclusion than this can be drawn by those who believe that we are part of the designed and deliberate creation of an intelligent Creator; not wilfully malignant: for it is impossible to suppose that such a Creator would have made his human race on the principle that the laws of their multiplication and of their subsistence shall be hostile and contradictory to each other; that we shall increase with a geometrical rapidity, but that the needed food shall be supplied only by an arithmetical scantiness, certain to famish and destroy those who were impelled to multiply and intended to exist in successive genera-

tions. All theories, therefore, which place the laws of our population and of our nutriment in this warfare with each other, are palpably at variance with the sound deduction of our reason, if we have been made by a good and wise Creator. They seem to be only suitable to those who disbelieve in a creation by an intellectual being. I was going to add the ephithet benevolent, but I think I need not, for, as such an opposition of laws as the geometrical in population and the arithmetical in food would make the continuance of the human race for a few centuries impossible, no creator, who had even intellect without goodness, and meant to have a continued series of mankind, would have devised or acted on a system that was certain to defeat his purpose. Hence, at the very outset of our inquiry, the very reason of the case assures us that the laws of our population and of our food have never been incompatible with each other, but must have been, from the beginning, planned, and put in action, and kept in action, in a congruous, adjusted, and always accordant manner. What is required by the one system must have been appointed to be supplied by the other, as long as human nature is intended to be the inhabitant of its present earth. If any one call this enthusiasm, I think the fanaticism must rest with him, and not with those who make these natural and reasonable inferences; they seem to be the correct conclusions from the authenticated premises.

Such being, in my apprehension, the rationale of the subject, how stand its experienced facts? We find immediately before us the deciding certainty that mankind have been living, and peopling, and increasing for above forty centuries since the deluge, and have always found subsistence for all their multiplying numbers in every generation; and, although they have enlarged from six procreators into a thousand millions that are now coexisting, yet these thousand millions find and obtain as much food as they require, just as naturally and as certainly as the sons of Noah did for their small number. This fact, therefore, fully corresponds with the principles that have been mentioned, and corroborates and elucidates their truth. There can be no enthusiasm in believing a visible certainty.

But when, from our present day, we look back into history, and inquire if there has been a single generation in the 150 that must have been succeeding each other since the renewal of mankind which perished from the obtainable food being

totally inadequate for the numbers who required it, we cannot find one in the whole series. At no one period of past times has such a result appeared, as that any generation was famished from their food not equalling the ratio of their population. Thus the geometrical ratio has never realized its hypothesis, nor ever shown itself to be superior in its operation to that of the subsisting power and means. On the contrary, in every age, the laws of population and of food have been in constant harmony. Whatever number came, they always raised the food they required. The laws of nature have never multiplied the one without equally increasing the other. This has been the invariably experienced fact, let the theory be what it may.

Our bodily fabric has been devised and constructed both on the system of the necessity and of the supply. We might have been formed of unseparating matter, like gold or marble. The particles of our body might have been as adhesive to each other, and as permanently fixed, as those in the columns of the Parthenon, which have lasted so many centuries, or those of the Venus de Medicis, which damp and time have not disunited. Our Maker has otherwise planned our being. He has framed our corporeal form on the scheme that, though it consists wholly of minute particles, and these at all times cohere so firmly as to be solid enough to accomplish all the operations in which our limbs are employed; and for these to act as substantial masses, with great muscular force; yet the same particles shall be also separable from their cohesion, and that continual streams of them shall be daily separating and passing away from us, through the many exhalent vessels within us, and through transpiring pores, which abound on the surface of our skin in a surprising exuberance. What he has thus made to be always moving off, require, by his law and will, to be as frequently supplied by fresh accessions of material substances taking their place, and carrying on the system of our being. Our daily food is the source from which the replacing and repairing particles accrue to the parts which want them; and a due portion of our vascular organization is ever active to carry them to their proper stations. Without this continual supply from our arterial and chyliferous systems, the body would soon waste into an atomy, and the principle of life would depart from it. We need, also, the continual development and diffusion of those aerial fluids which we term

the caloric and the electrical: and these are disengaged in our digestive as well as in our respiratory process. From all these and other causes which physiology will explain to you, our daily nutriment is indispensable to us. We have been thus, with a deliberate and determined purpose, so specially framed as to require it. It is not left to our will to take or to forego—we must have it. We may, indeed, live a few days without it, in a pining, inactive, or torpid state; but this is when we are in circumstances that check or prevent the exhaling or transpiratory process. Thus a woman, almost naked, lay buried for six days under the snow, and yet, on being taken out, recovered.* A more extraordinary instance happened only sixteen months ago, of a man entombed in the falling earth of the coal-works where he was working, and yet continuing alive for twenty-three days without any food. But, although he lived to be dug out in all his consciousness and recollections, yet his functions had been so much injured by such a long absence of food from his system, notwithstanding his enclosure, that the kindest care could not prevent his dying on the third day after his extrication.†

* Phil. Transact., 1713, vol. 28, p. 265. So a case of unnatural sleep exhibited, in one part of it, life continuing without food. A labourer about twenty-five, of a robust, fleshy habit of body, fell asleep on 13th May, 1694, and continued asleep for a month, when he awoke as usual, and went about his ordinary avocations. He fell asleep again in 1696, and continued asleep for seventeen weeks, *during the last six of which he ate nothing*. He fell into a third fit of this somnolency in 1697."—Phil. Trans., 1705, vol. 24, p. 217.

† On the 8th October, 1835, part of the roof of the coal works at Dailly, Ayrshire, fell in, and before John Brown, about sixty years of age, could get out, the falling ruins stopped his passage, and he was confined there until the 31st of that month, when he was restored to the light, after having passed twenty-three days without a morsel of food. The only substances he took in this time were some tobacco he had with him, and some strong chalybeate water which he found there. His mind remained quite composed, and he counted his time by the noise the men made at their stated periods of work.

"For the first and second week he moved about in his gloomy cell, which was an area of thirty yards, seeking for some avenue of escape: but afterward he became so weak as to be unable to reach his drink—the disagreeable water. The feeling of hunger left him about the second day.

"When found, he was lying on his breast on the ground, nearly extinct; his extremities cold; his voice reduced almost to a whisper, and his emaciation very great. He seemed like a living skeleton. His brother labourers at first cautiously moistened his parched mouth with a little butter, then gave him some milk, and, at regular intervals, ar-

our existence in our human life, and our subsistence
itious matters to be derived from it, exterior to our-
have been linked together in the mind and plan of our
, and in his executed system of our nature, as com-
as our vital principle is with our bodily frame. We
erefore, be certain that our providing and multiplying
ve been accurately adjusted to each other, and are al-
ting together with this united adaptation.

uld have been easy for our Creator to make us human
with our present human form and limbs, and even
s of body, and to pass a human life, without making
y aliment indispensable to us; for he has shown, in
lividual cases, that some modifying changes, even in
ent organs, would produce the effect of a human life
ng even for years without taking any food. A Scot-
in the last century became an example of this sort;
l for thirteen years without eating.*

ier instance of a human being living for eighteen
thout food, and yet continuing all that time in his
occupation, with apparent health, occurred in a High-
pherd. Here we find that even a moderately active
arth might have been made the condition of human
y some comparatively slight change in the interior
tion, without any food being necessary to its contin-
These phenomena become important to us on this

nd sherry in small spoonfuls. Milk was the first thing he
His pulse became regular and strong, and his tongue clean
. There were great hopes of his re-establishment, but he
eath without any appearance of pain on the night of 3d No-
35, having lived only three days after his liberation."—Ayr
November, 1835.

ccount sent to the Royal Society, and printed in their "Trans-
tates that "a young woman in Ross-shire took to her bed,
speech and the use of her eyelids. Her jaws then became
d she refused all sustenance. In this state she had continued
years, when the account was drawn up. Her parents often
to convey nourishment into her mouth; first, by forcing open
nd afterward through the hole left by two of her teeth which
t she did not appear to swallow any of it. At first she drank
y some water, but afterward gave it up entirely. She did not
ways in bed, but after some years got up, and employed her-
nning wool."—Phil. Trans., 1777, vol. 67, p. 1. Thomson's
Soc., p. 142.

ell-authenticated instance was related to the Royal Society.
guson was employed in taking care of cattle in the Highlands.
r 1724, having overheated himself by running on the moun-

subject, because they teach us that there was no physical necessity for making daily nutriment essential to our earthly existence, but that, by some alteration in our functional agencies, not perceptible by human science, our present bodily form and actions might have taken place without requiring any subsistence for their continuance. It follows, from these circumstances, that our need of continual food has been specially and purposely attached to our human life by the Deity, for purposes distinct from our mere existence on earth; and, being made so artificially indispensable to us, without the actual necessity of its being so, it also follows that he likewise made it a special part of his system as to mankind, that their successive populations should always have from the earth on which he stationed them, and from the vegetation and animals which he also created to be the materials of our nutrition, whatever quantity of them the wants he caused within us would require. Thus again the conclusion forces itself upon us, that our population and our subsistence are made by his established laws to be always proportionate to each other.

He has acted still more specially on this point than merely by giving us food. He has taken the same care of all the numerous orders of his animal kingdom; and birds, serpents, quadrupeds, fish, insects, and every other living creature, find always what they need. He might have done no more for us than he has done for them. He might have consigned us to the same kind of aliment, and left us to eat grass like our cattle, or what forests furnish, and dig up what roots we could find. We see by the monkey tribes that living forms nearly approaching to the human figure might be so sustained in all their liveliness and activity. But the phenomena which sometimes occur prove even more than this. An instance has been mentioned to have occurred in Germany where an actual human being, happening to grow up in a wild state, lived habitually and throve in size by making grass his food.* So

tains, he drank excessively from a spring of cold water, fell asleep on the spot, and awaked next day in a fever. He recovered, but lost all relish for food, and, for EIGHTEEN YEARS afterward, he took no other nourishment than pure water, with now and then, during a certain period of the year, a draught of clarified whey. During the whole of this time *he continued in his employment*, and enjoyed health and a certain portion of strength."—Phil. Trans., 1742, vol. 42, p. 240. Thompson, p. 18.

* This phenomenon appeared in a wild boy, which a recent traveller

an earthly population of even human beings, no more
grass which our cattle fatten upon was essentially
But, instead of thus levelling our race to them, he
the trouble to devise and produce the corn plants
se, that we might have bread and flour, and all the
of gratifying things composed from them, for our reg-
itenance. He has done this; and after this special
ation of particular kindness to us, shall we allow our-
suppose it possible that he can have made our popu-
d our subsistence to be incompatible with each other;
an have framed us to multiply with a certainty that,
so, there would be no subsistence to supply us as
ised! All these facts concur to assure us that the
are in perpetual harmony with each other, and never
n, and were not made or designed to be in constant
tion to each other. The gift of corn to us instead of
testimony of his philanthropy which should guard us
ll such distrustful misconstructions of his economy
life. They are unreasonable in all who believe in a
nd intelligent creation.
We have complete evidence before us that he might

itinent thus describes: I shall give it in the words of the pro-
vernment: "On the 15th March, 1749, two fishermen of Ka-
id in the Hansag morass a being whose appearance was that
animal, but who bore an exact resemblance to the human
pt that his limbs were longer, the fingers and toes double the
th, and his skin scaly and knotty. His head was perfectly
es small and sunk; hooked nose, and mouth immoderately
was supposed to be about ten years of age; and when first
as impossible to induce him to eat anything but grass, hay, or
r would he allow himself to be clothed. After being confined
year, he consented to wear clothes, and to eat cooked vict-
conformed in every respect to domestic habits, and was bap-
it was found impossible to teach him to articulate a single
If at any time he was able to elude the vigilance of his guards,
bly jumped into the moat surrounding the castle of Kapuvar, in
was kept, and dived and swam about in it as if it was his native
In consequence of his apparent adoption of the manners of
guardians relaxed their vigilance, and he disappeared. It is
that he jumped into the river Raab, a short distance from the
swam to his old residence in the Hansag morass; for he was
time afterward by a party of fishermen among the reeds and
the shore of the Konigsee, a small lake in that morass, but on
them he dived to the bottom and disappeared. After a lapse
ears he was again seen by another party, and a second time
d." Signed 21st August, 1753.—Sketches in Germany, vol,

have made a world of such human beings as we are without food being essential to us, or without corn being that food and might have nurtured us by the grass with which he has clothed the earth, on which we might have fattened like our cattle, though our numbers should become a thousand times what they are; but he has taught and trained us to seek and use a richer nutriment, and has amply supplied all our multiplying populations with this ever since they began to live upon our globe.

What has been we may as justly conclude will continue to be, on this subject as on any other of which we deem ourselves most certain. As the subsistence of mankind has hitherto always equalled the wants of their population, notwithstanding their vast multiplications, always progressively increased as they enlarged, and with a coinciding ratio, and as the same necessity for it continues, our true inference, from the principle of an intelligent creation, will be, that the same concurrence will still occur, and that both will multiply together if either does. We have the same right to rest confidently on this conclusion, as we have to expect to-morrow's daylight or the next year's spring and summer; for though we have ascertained the laws and actions of the moving forces of our globe, and of the planetary world by which our days and seasons return, yet we have not the smallest ground for the belief or certainty that these agencies and their results will continue for a single hour. We have nothing but their constant operation up to this moment on which we can found our hope or assurance that they will roll us round ourselves and our solar governor. We have exactly the same foundation for the confidence that the earth will always produce the food which its inhabitants require. Our ascertained knowledge of the laws of the planetary movements only informs us of their past and present agency, as the subsistence of the human race hitherto gives the evidence that the laws which produce it have thus far always effectually operated. The prospect as to the future is the same in both cases. We have no doubt that the spring season and its renewed vegetation, and the summer temperature and its fruits, will recur as long as mankind exist. For the same reasons, and on the same natural grounds, we ought to question as little their deriving sufficient food from the earth as long as they shall need it. The maintenance has never yet been deficient, just as the circuitary move-

ments of the earth have never ceased. Yet, for aught we know, they may stop this very night, and daylight never return to us. This event is just as likely as that food will fail us. We are quite as ignorant what the moving force in our solar system is, as we are of what the vegetative agency may be: but we know in both instances that they are, and that they act only as they have been created and ordained to do by their Great Author. Both have been appointed to be what they are, expressly that our world, and ourselves, and our system of living nature, and our course of human life may be what each respectively is. As long, then, as their Maker means that they and we should continue, both will be and will act onward in their farther process as they have hitherto done, and no longer. It will be his special will that alone can, and that only will arrest or change the agency or the results of either. But as he has caused both to be equally indispensable to us, he will no more suffer the one to stop than he will nullify the other.

We have, in truth, a more founded certainty that sufficient subsistence will be furnished to us by the cultivation of our earth, and by the natural means and agencies which have been ordained to produce it, than we possess for the continuity of our solar system; for we have received the express promise from the Almighty as to our food, but none as to the unceasing duration of our diurnal rotation and annual circuit. Immediately after the deluge, this prophetic promise was given to Noah, which has ever since been literally fulfilled every day and every year of the four thousand one hundred and eighty-five years which have since elapsed—

"WHILE THE EARTH REMAINETH, HARVEST; and cold and heat; and summer and winter; and day and night, SHALL NOT CEASE."*

Here is sacred assurance which has verified its Divine authority, and the steadfast veracity of the Promiser, above 4000 times in the constant repetition of its accomplishment through all that series of time. We may then satisfy ourselves, from the authority of Revelation as well as from our natural reason, that the annual supplies of the earth will never be insufficient for its population; for the promise was made to

* Genesis, c. viii., v. 22.

Noah, in conjunction with the command for an exuberant multiplication of the human race.*

Having thus contemplated what appear to be the true principles of thought on this important subject, let us now direct our attention to the facts which our living experience presents to us as immediately connected with it. We shall find them to be in that due correspondence with our preceding reasoning which, if this be just, may be expected from them.†

* And God blessed Noah and his sons; and said unto them, Be fruitful and multiply, and replenish the earth. Bring forth abundantly in the earth, and multiply therein.—Gen., c. ix., v. 1, 7.

The progress of Ireland, both in its population and productions, is a striking instance how these multiply together, and with no inferiority in the agricultural ratio. In 1727, an act of Parliament was prepared to compel farmers to apply five acres out of a hundred to tillage and corn. "When we see an act of Parliament thus called for to compel the tillage of a twentieth part of the soil then in cultivation, we are justified in inferring that the land at that time under tillage did not exceed a fortieth part of the cultivable soil of the kingdom. We estimate that the arable lands of Ireland amount at present to at least 9,000,000 acres; and that the produce of the country has increased from thirty to forty fold, while the population has only quadrupled."—Athenæum, 1836, p. 902. Here production has vastly outrun a rapidly-multiplying population, instead of being exhausted and overwhelmed by it; for though Ireland has an exuberance of numbers as to their civil employment and due arrangement, she has the means of nourishing a very large increase of them.

† I cannot close this letter without adding, that although I differ so greatly from Mr. Malthus as to his theory of the comparative laws of our population and subsistence, yet it is with the most sincere respect for his talents, intelligent mind, and personal character. It is impossible to read what those who were intimately acquainted with him have expressed upon his moral qualities and feelings, without that esteem and regard which such descriptions excite, and which such a man deserves. That he meant to benefit and not to injure society, and believed that he was doing so, I am fully satisfied, as I am that he possessed a highly-enlightened mind. One passage has been quoted from his writings, which I think so fine and so just in its main principle, that I cannot but transcribe it for your consideration.

"It is an idea that will be found consistent equally with the natural phenomena around us, with the various events of human life, and with the successive revelations of God to man, to suppose THAT THE WORLD IS A MIGHTY PROCESS FOR THE CREATION AND FORMATION OF MIND. Many vessels will necessarily come out of this great furnace with wrong shapes. These will be broken and thrown aside as useless, while those vessels whose forms are full of truth, grace, and loveliness will be wafted into happier situations, nearer the presence of the Mighty Maker."—Edin. Rev., No. 130, p. 500. May this be his allotment!

LETTER XXIX.

Indications of the present general Superabundance of Produce for the Subsistence of Mankind, notwithstanding the universal Multiplication of the Populations of Europe, and other regions of the Globe.

My dear Son,

Let us now consider the facts as to the general subsistence of the human race which our living world is presenting to us; and the reasonings to which they lead us, and which they seem to warrant.

The first ascertained truths to which I will call your attention are these—

We have been living as a human race on our globe for almost six thousand years, and on the present surface of it for above two thirds of this length of time; so that our European quarter of the globe has been called the Old World, and, in my younger days, was represented by agricultural writers of eminence as worn-out soil, much exhausted by continual working, and not to be compared with the fresh and untouched ground of the new continent. Yet, although while our earth was supposed to be yearly becoming thus debilitated by age in its productive powers, the states of Europe have multiplied into a larger contemporaneous population than our planet has ever held before, and therefore calling for more food; we find that the depreciated soils of our own country and of our neighbours, notwithstanding their enfeebling antiquity, are yielding to us and all, in our annual harvests, all that our augmenting numbers require. Nor is this only the case now; but, on looking backward into our history, we find that in every previous period the ratio of production has never been inferior to the ratio of our multiplication; but, on the contrary, has continually been the fully equal power. At this moment, in what have been deemed the declining years of our world, its powers of produce have been superior to its powers of popular multiplication. Our food exceeds, in its existing quantity, the present demand for it. We have more corn than we consume, and more is coming up than will be *required by the rising* generation. On what is the urgency

of some—of several political economists, who uphold the Malthusian hypothesis—to have our corn laws abolished, founded? On the vegetable produce of the earth being as inadequate to the supply of the living numbers as the opposition of the contrasted geometrical and arithmetical laws must have long since made it! No; they require the repeal of the restrictive regulations which keep foreign corn from our shores; on their perceiving and knowing that there is more corn on the earth—now in hand, and certain to be produced—than its inhabitants will need. The demand of free importation arises from the ascertained certainty that the Continent and other regions have grown more than their populations consume, and that this could be brought thence to our coasts at such inferior prices as to be cheaper than the harvest of our own agriculture. As long as our merchants find articles of food abroad offered to them for sale, so long we may be sure that the ratio of vegetable produce is superior to that of population, instead of being at all below it. With this fact broadly before us, it is impossible that this ratio can be, or can ever have been, below the peopling one, much less so incalculably as the geometrical law supposes.

Coinciding with this fact of the mercantile solicitations for liberty of free importation are also the circumstances which I will mention, from the periodical journals of the day, as the best practical authorities. The foreign dealers in 1833 complained of the diminution of their trade, and of the value of corn, and of its fall in price, because there was no demand for it elsewhere to take off the superfluous produce which had been accumulating among them.* The countries of Europe had on hand so much more than their populations wanted, that bad weather was even deemed advantageous, from the hope that, by injuring the shooting vegetation and preventing a good harvest, it would raise the prices of the stocks on sale.†

* Thus, in 1833, I read from the foreign journals these passages: "Konigsberg, December 8. The corn-trade remains in a very dull, inactive state. The demand continuing very limited, has rendered all sorts of corn almost nominal in value." "Hamburg, December 23. The falling off in the demand for export has caused our stocks to increase. Except local consumption, we have little demand for wheat." "Stettin, December 20. The accounts of the corn-trade we receive from France and England are very discouraging, and hold forth little chance of much demand for foreign wheat, until at least next spring."

† Thus the letter from Bordeaux, Dec. 27, stated, "During the last

Because war having long ceased, there was no more that extraordinary consumption which had made subsistence dearer; the superabundant productions of corn and wine, from their ordinary cultivation, were so much beyond the ordinary use of them, that the wine in 1834 was unsaleable, and the corn had become so cheap that the landowners in Germany were much distressed.* The German farmers sent abundance to the foreign dealers; but other nations having enough of their own produce, it found so small a sale as to sink in its money-worth.† The effect of our corn-laws, which prevented Prussia from sending her superfluity to our market, is represented in 1834 as causing its land to fall in price, and as destroying the agricultural trade of Poland for its superabundance.‡ So

six weeks the weather has been very inclement, and the rain almost incessant. This circumstance, *more than all others*, has given to the trade a degree of firmness; but on the return of fine weather we shall relapse into our dull and inanimate state."

* An article from the Hessian provinces, in the Frankfort paper of 15th Jan., 1834, stated, "We have wine and corn. The crop looks admirably. The weather is so mild that the spring flowers already show themselves. We have tranquillity and peace. We are contented with our government. We think of no unlawful innovations. We have no hotheaded agitators; and yet *we are not happy*. For several successive years the price of corn was high, and houses and land rose in value accordingly. At all public auctions, estates sold at high prices. But now the quarter of wheat, which a few years ago was worth thirteen or fourteen florins, is sold for five florins. Wine, which was then in great demand at 120 to 150 florins, is now not required for, but the capitalists demand payment. It is natural that such a state of things must cause distress and anxiety. They do not feel any of the happy effects which were expected from the new commercial convention, which has conferred on them the blessing of what is called free trade."

† "Lubeck, Dec. 23. We are receiving good supplies of wheat and barley, with some rye; the wheat is fine, weighing full 62 lbs. a bushel. But the dulness in the Dutch and British markets has brought prices down to a very low point; and prime parcels may be bought so as to stand only in twenty-three florins a quarter, free on board, and free of all granary charges to the end of April."

‡ "Berlin, 14th March, 1834. The late debates in the British House of Commons on the corn-laws have excited great interest here, for they affect Prussia more than any other country. Since they have been in force, the ports of Dantzic and Konigsberg, which were previously so animated and wealthy, have become changed. The price of land has fallen one fourth, and as the commerce of the interior of Poland is annihilated, the progressive decline of this hitherto flourishing province must create no surprise. Notwithstanding all the efforts made by the government to revive, by other means, the expiring prosperity, its *former opulence cannot be recovered* UNTIL *exportations* to England and the communications with Poland are re-established."

far was population in Europe from overrunning its subsistence in 1834, that a great part of Poland was not in cultivation, and of the land in actual husbandry, though only a third part was raised from it which that portion could produce, yet even this was more than its own consumption required; so that their wheat was given to the cattle, because it had grown more than its people consumed.*

The same state of things between population and produce existed also in America in 1834, both in the United States and in our Canadas, though each was so surprisingly multiplying in numbers from immigration, as one of our preceding letters showed. Here also the demand was so much less than nature's supply, that the price of it sank too low to meet the rate of wages, and to return a profit on the capital employed.†

This over-produce—its exuberance beyond the consumption of the population, was not in any one country or in the most fertile regions, but equally so in the less favoured ones; for we find Sweden, though so far in the north, and so near gelid Lapland, and so full of heaths, lakes, and mountains in herself, yet had so much more wheat than she wanted as to be urging her government in 1833 for leave to export it.‡

From the produce most generally exceeding the demand of the population for it, all countries in some years, and most countries at all times, are enabled and desirous to export their superabundance, even though some of their provinces receive

* Sir James Graham, in his speech in the House of Commons on 6th March, 1834, referring to the agricultural condition of Poland, mentioned that, "from the statement of Messrs. Armand and Vering, two most respectable merchants in Dantzic, it appeared that a great part of the land in Poland was in pasture for want of encouragement in cultivating grain. The soil of Poland was lying waste. The cattle were fed on wheat, and three times more could be produced from the land then in cultivation, if there was a market for its consumption."—Public papers, 7th March, 1834.

† A Scotch traveller states, "A large capital invested in farming in America does not pay a remunerating profit. It is allowed by all the farmers, both in the states and Canada, whom I spoke to on the subject, that farms do not yield a fair profit for the amount of capital embarked. This is owing partly *to the low value* of produce; partly to the high price of wages; and partly to the system of bartering they carry on, which makes it very difficult to realize the cash."—Journal of an Excursion to the United States and Canada in 1834.

‡ "Stockholm, 5th Nov., 1833. Government intends to allow the exportation of wheat without any duty until the end of June, 1834, with the view of preventing the continuance of the very low rates at which the article has been selling."—Public papers.

a partial importation. This has been the case in our own country. Parliament, at the revolution in 1688, enacted a bounty on exportation when wheat was at 48*s.* a quarter or below, and for fifty-five years England was an exporting country.* In the next fifty-five years the bounty was sometimes discontinued and sometimes renewed. Importation was at times allowed and at others prohibited ;† but always amounting to a very small part of our actual consumption‡—at present, notwithstanding our surprising increase of population, we are actually growing more than our numbers use.§

Flanders produces so much, from a soil not distinguished for its natural fertility, that although crowded with inhabitants more densely than perhaps any other country, yet it exports every year one third of its harvest.‖ The produce, as compared with the population, even doubles the amount of ours.¶

* "From 1697 till 1751, our exports of wheat exceeded our imports by 23,000,000 of quarters. There were 23,527,868 quarters exported in these fifty-five years, which make an annual average of 427,961 quarters."—Cathcart on the Corn-laws.

† "In 1757 exportation was prohibited, and in 1765 the bounty on it was discontinued, and importation permitted. In 1773, when wheat was under 44*s.*, a bounty of 5*s.* was given to its exports, and importation was prohibited. In 1791 the bounty was continued when under 44*s.*, and exportation allowed till the price became 46*s.*"—Ib.

‡ "From 1765 to 1820 we imported 29,524,562 quarters, which make an average of 536,810 annually."—Ib. This would not be more than a thirty-second part of what our present population consumes, allowing each person a quarter; but in that interval we had to supply our armies in America at one period, and on the Continent, in Spain, and elsewhere at another, and also occasionally exported.

§ In September, 1835, an able article in a respectable periodical states, "It seems at length admitted that the quantity of wheat in England and her dependances is equal to the consumption, a fact of immense importance. The agricultural year has been three weeks longer this season than last, and yet the stocks of wheat in hand are larger than at the commencement of the harvest of 1834. Since 1830, whether from better harvests, or the consumption of more meat or potatoes, or other substitutes for bread, it is not now to be questioned that THE GROWTH equals, and probably, during the last three years, including this harvest, 1835, HAS EXCEEDED THE DEMAND."—New Mon. Mag., Sept., 1835, p. 112.

‖ Mr. Radcliffe, after thus describing the FLEMISH farmer, "He never looks beyond the enjoyment of moderate comfort, abstains from spirituous liquors, never exceeds his means, pays his rent punctually, and has always something beyond his necessary disbursements," adds, "This is done upon a soil which naturally is the reverse of rich, and, in fact, a bad soil. Yet such is the effect of industry and frugality, that although there are about five souls to eight English acres, *yet one third of the produce of the land* is annually exported."—Radcliffe's Report on the Agriculture of Flanders.

¶ Mr. Radcliffe remarks, "Sadler says that in England there are ten

France is also, in some degree, an exporting country, although its consumption of bread is supposed to be greater than ours. Though it occasionally imports, as harvests fluctuate yet its exports in 1834 far exceeded its imports.*

I will only instance two more countries as those where from the indolence of the people in the one, and the comparative rudeness and sterile soil of much of its empire in the other, we should least expect any superabundance. I mean Spain and Russia.

In both these countries the government acts like the Egyptian ruler in the time of Joseph. They collect from the cultivators a portion of every harvest, and store it in magazines as a provision against the deficiency of any ensuing year from unpropitious seasons. This is done so very largely in Spain that there are above 5000 of these public depositories.† In Russia, a similar policy is pursued, to the disadvantage of commercial industry.‡ Indeed, it is obviously a measure of a half-civilized country only, that has but little intercourse of free traffic with other nations; as the supply which demand always brings in is far more efficient and more generally advantageous than any magazined precautions. But be the measure wise or injudicious, it could not be adopted unless the country, in its general harvest, produced more than its

souls to every twenty acres, and in Ireland thirty acres to ten persons. Thus the soil of Flanders, far inferior to our own, can sustain twice the amount of human existence."—Radcliffe's Report.

* The Moniteur, in March, 1835, stated the comparison in figures for 1834, and added, "The quantity of flour exported is six or seven times greater than what is imported; and the corn grown on the French soil and sold abroad amounts to more than twelve times the quantity introduced into France for consumption." In 1832 there was a considerable importation of foreign wheat, "but in 1834 there was scarcely any importation of it."

† "In foreign countries, magazines for grain are erected by government in different parts of the kingdom, to provide for a scarcity. In Spain there are upward of 5000 of these depositories. Every occupier of land is compelled to bring in a certain quantity of corn, proportionate to the size of his farm. In the following year he takes back the corn and replaces a *larger* amount of the *new* growth. Thus he continues annually to increase the stock by these contributions, until a certain measure of grain is deposited. Then each party receives back the whole of the corn he has furnished, returning in lieu of it an equal quantity of new corn."—Mark-lane Express, 20th April, 1835.

‡ "In Russia, grain is purchased by the crown, and stored; and as prices advance, from any failure in the produce, the article is disposed of much under the market price; thus causing a total stagnation of the trade, and the ruin of individuals."—Ib.

population consumed. For what is thus collected and warehoused must be taken from the part which is not eaten. The difference between Spain and ourselves in this point is, that if our farmers have more than they want or can sell, they house the overplus in barns of their own; whereas the Spanish government compel the surplus to be brought into their depositories.

In some years the harvest falls short in Spain in some of its provinces. This occurred in 1834 in two of them, when importation from other countries became necessary in the spring of the next year, and was then allowed into two of her ports.* But this necessity is ascribed to the voluntary carelessness and aversion to labour of the Spanish people†—a peculiarity which has become hereditary in them since the silver harvest of South America excited and engrossed their imagination. Hence, in 1803 and in some preceding years, they had a deficiency, noticed to be unexampled elsewhere, of one fifth to supply;‡ but even this was but temporary; and this indolent people, with all their want of skill and industry, and notwithstanding all the waste, and destruction, and interruptions of Napoleon's rapacious warfare against their independence, are now beginning to have a small surplus to export, and might have a far greater superabundance if they would cultivate more of their cultivable ground.§ Her neighbour, Portugal,

* "An importation of foreign wheat has been required in Spain, and the admission of wheat is permitted in the ports of Cadiz and Malaga. The principal scarcity has existed in Catalonia and Arragon. The Catalonians prefer the secondary and inferior wheats, as being the cheapest, neglecting the finer qualities on account of their price. The forthcoming crops have an unfavourable appearance in both these provinces."—Mark-lane Express, 4th May, 1835.

† "Though the soil of Spain is exceedingly fertile, producing in many places, almost spontaneously, the richest and most delicious fruits, yet the yield of corn has been, relatively, very disproportionate, owing to the *neglected state of agriculture and native indolence of the people*, it being justly said that few countries in the world owed more to nature, and less to industry, than Spain."—Ib.

‡ "In 1803, we find that the quantity of corn grown, of every kind, amounted to only 11,974,480 quarters; which, after deducting the seed, fell short, by more than 2,008,900 quarters, of the quantity requisite for consumption. Thus there was an annual deficiency of one fifth of the demand. *No other state* in Europe was exposed to the chance of so much distress from famine."—Ib.

§ "But of late years the inhabitants have rallied from their supineness. At present, the annual produce is estimated at 21,295,860 quarters; leaving, on average years, a surplus to export of 2000 to 3000

still imports, because her peasantry will not exert or acquire the common skill and industry of beneficial husbandry. There is plenty of land, and would be abundance of produce, but her own people will not raise it as long as they can procure it elsewhere. She needs, therefore, cultivators from other countries to till her useless land and to excite her into a self-providing imitation.*

Russia is one of those countries in which agriculture is not a favoured object of attention; and her servile peasantry are declared not to aim at producing more than they want, and thus expose themselves to suffering when peculiarities of any season lessen the amount of their crops;† nor will they cultivate potatoes.‡ Yet Russia still finds enough come, though unsolicited, to export both from her northern provinces on the Baltic and from her southern districts on the Black Sea.§ Hence, although Russia has, from colonization and conquest, so much multiplied her population, as we have noticed before,‖ yet she has fully within herself the means of subsisting them, if she will put them into use; and this she always does unless when accidents of the weather occasion, in some portion of her vast dominions, a partial scarcity.

quarters. There are still 2,000,000 acres of land which might be rendered productive."—Mark-lane Express, 4th May, 1835.

* "Portugal, to grow her own wheat, would require the cultivation of 50,000 acres, in addition to the wheat land now cultivated. The Portuguese sytem of cultivation is the worst in Europe. All the native farmers have as much land as *they* can cultivate: the augmentation must be made by foreigners. Men can be hired at harvest for a shilling or eighteen pence a day, without food."—Ib., 11th May, 1835.

† In Russia, "the most fertile provinces are those in which agriculture is most neglected, because the landholders are induced, by the prevailing rage for speculating in manufactures, to devote their fields to other produce than that of corn, which they limit to their own immediate consumption; so that, if a harvest fail, they are without any provision in their barns."—Suabian Mercury, Jan., 1834.

‡ "The cultivation of potatoes is also neglected in the greater part of Russia, because the followers of the Greek Church have a decided repugnance to them as food."—Ib.

§ "Extensive exports of wheat and rye were annually sent from Russia to the lower Baltic ports, and thence to England, Holland, France, and the Mediterranean. A large portion of the imports into the Mediterranean consists of hard wheats, for the manufacture of macaroni, which are drawn from the Russian ports on the Black Sea."—New Farmers' Journal, 27th Nov., 1833.

"The Russian Crimea has hitherto been a large grower and exporter of corn."—Ib., 18th Dec., 1833.

‖ See before, Letter VII., note ‖, p. 56, and ‖ p. 57.

Nothing more satisfactorily shows that the whole earth is annually, at this late period of its chronology, and with its before-unequalled population, producing on its general surface much more than its so-multiplied numbers need, than our yearly experience of what takes place when, from the variations of the weather, a failure of its usual harvest or of a sufficient crop happens in any country. Does that population therefore perish because its food, from that temporary event, will not give all of it their usual supply? No. Plenty exists elsewhere, and is brought from the superabounding to that which for the moment is deficient.

Thus the southern provinces of Russia, which usually export much from the Black Sea to Turkey and the Mediterranean regions, were found, from the unusual drought of the summer in 1833, not to yield that quantity of their articles of subsistence which their inhabitants in the ensuing year would need. What occurred? The people were not left to die, in their provincial locality, of famine from the temporary deprivation of their natural supply. Their government, aware that other parts of Europe had what they wanted, opened their ports to foreign corn, and invited importations.* By such a relaxation we learn that Russia, in ordinary years, so depends upon her own sufficient growth as to prohibit the introduction of subsistence into it—a proof that her general production equals her consumption, notwithstanding her vast and varied population. But while her southern districts thus suffered, her northern provinces had crops to their wishes,† and so much more than their needs required, that the government bought from them a large portion of their harvest, to convey and

* Antwerp, 20th Jan., 1834. "The Consul of Russia has just published the following notice: 'The harvest having failed in several of the governments in the south of Russia, an ordinance of the ministers, dated 29th July, 1833, has decreed the free importation of corn, by the ports of the Black Sea, Danube, and the Sea of Azoff, and on the land frontier of the southwest of the empire, at all the points of the custom-house jurisdiction of Radzivileu, Skrelony, and Ismail.'"

"By imperial ukase, dated 1st Sept., 1833, it is ordered that, from that day until 1st Jan., 1835, all kinds of grain and pulse, as rye, peas, buckwheat, oats, barley, millet, beans, flour, and groats, pearl-barley, &c., shall be admitted duty free in all ports of the Baltic, the White Sea, and the land frontiers towards Prussia."—Belgian Papers, Jan., 1834.

† "In Russia, most of the northern governments, where there was abundance of rain, had a pretty good harvest. The government of Moscow and the Baltic provinces have had *an abundant harvest*."—New Farmers' Journal, 12th Feb., 1834.

sell, at the prime cost of it, to the other parts of the kingdom that were in want of it.* The merchants of Europe eagerly brought to Russia what she required from their superabundant stocks, which were disposed of by the authorities in the same manner.† In this same year also, though they imported corn, they had grown and exported an unusual quantity of hempseed, which might have been used for food.‡ The Russian peasantry use a much coarser diet than ours need subsist on.§

The same test of nature's fertility and exuberant bounty of produce, exceeding the demands of the new increase of population in this fancied old age of the European soil, has been still more strongly presented to us in the last year, 1836, by America. The United States, being chiefly agricultural, and replete with rich vegetable earth in all its vigour, and full of new states and populations emulously employed in husbandry for the purpose of sale and traffic, and which thereby have been a kind of granary-asylum to the rest of the world; this industrious country experienced, from unfavourable weather, such a diminution of their ordinary harvests last year, 1836, that, instead of contributing, as usual, largely to the food of other countries, it has been obliged to call upon Europe to help it from her superabundance; nor did she call in vain. Every part of Europe had enough and to spare, and therefore gladly heard the new and unexpected demand; happy to know

* "In all these more favoured districts, the government purchases large quantities of corn, and particularly rye, at moderate prices; and while the navigation was open, large supplies were imported from foreign countries. All the corn so purchased is deposited in magazines in the southern provinces, and sold to the indigent inhabitants at prime cost." —New Farmers' Journal, 12th Feb., 1834.

† The pressure of the deficit, in this autumn of 1833, marks by its contrast the usual sufficiency or abundance of their harvest. "Several of the provinces which in other years, as in 1817, could spare 100,000 casks of rye alone for the supply of other countries, have now comparatively nothing for the maintenance of their own population."—Ib., 15th Jan., 1834.

‡ "Riga, 23d Dec., 1833. Hempseed. This year's export is greater than ever before, 100,000 barrels, of which Belgium alone has received 80,000 barrels. This crop is considered abundant; but it is almost expected that this article (hempseed) will be partly used as a substitute for corn in those provinces where the crops of the latter have failed."—Foreign Papers.

§ "Here the lower orders of people exist principally on black bread and groats, as potatoes form a comparatively small portion of their food." —New Farmers' Journal, 1st Nov., 1833.

that there was a distant market which would take their superfluity.* This abounding state of produce in hand was so general, that even Scotland could afford, and was willing to send to the New World part of her hay.† All that was wanted has been, in due course of the navigation, taken to it; and, what is perhaps more extraordinary than the necessity, at a much less price, though several thousand miles off, than her citizens had to pay for the same articles from their own back settlements.‡ How expressive is such a fact of the superabundance of European stocks, notwithstanding their universally multiplying populations!

All parts of Europe seem able and desirous to export. France even seeks to supply us with potatoes cheaper than we can grow them.§ The Italian ports, even Naples, complain of the dulness of trade, because there is no foreign demand for the corn they are ready to export.‖ Italy is also now growing the hard wheat it used to fetch from the Russian ports on the Black Sea.¶ Even regions so near the frozen zone as Archangel have so much produce to send out of the country as to load several vessels with it.** The great

* A respectable periodical, in January, 1837, thus states the circumstance: "In America the wheat crop is very deficient, and the necessity for the importation of 5,000,000 bushels is anticipated. This calculation is made after all allowances consequent upon increased economy."—New Monthly Mag., 1837, p. 148.

† "A vessel is about to sail with a cargo of 10,000 stones of hay from Aberdeen, and a larger will follow from the Clyde."—Ib., Oct., 1836, p. 257.

‡ "It is stated as a new and curious circumstance, that wheat may be shipped from the Baltic and Mediterranean at about half the rates charged upon the same article from Rochester to New-York, and about one quarter of what is charged from Ohio."—Ib., Jan., 1837, p. 148.

§ "An immense exportation of potatoes is at the present moment taking place at Havre for England. The price has doubled there within the last month."—Standard, 6th Jan., 1837.

‖ "Naples, 27th Dec., 1834. The demand has subsided. Good Barletta wheat may be had at 30*s.* a quarter, put free on board." "Leghorn, 21st Dec., 1834. The corn-trade is in a dull state; white Tuscan wheat, 45*s.*"—New Farmers' Journal, 8th Jan., 1834.

¶ "At Odessa hard wheat is realizing above 45*s.* a quarter, and the stocks very limited. It is, however, fortunate for Italy that its entire dependance on supplies from Odessa, Taganrog, and Marcanapoli has been of late years diminished by the cultivation of hard wheat in Apulia, enabling them *to make macaroni from their own wheats.* This is the principal support of the poor, and the favourite article of food of the upper classes of the Neapolitans."—Ib., 27th Nov., 1833.

** An article in *the foreign* papers from this port on the White Sea, in

reason of Prussia for establishing throughout Germany new custom-house league, for the exclusion or repression foreign commodities, except at unsaleable duties, aimed p cipally at our manufactures, has been stated to be to com us to admit their superfluous corn-produce into our island

What all the above-mentioned facts concur to show to true on this subject is likewise confirmed by the acknowled result, at this time, in our own islands. Although our nu bers have increased beyond all former proportions, yet production of food has also augmented still more. It has b often asserted, and theorized by many till it became an hal ual notion with us that we did not grow enough for our o

November, 1833, shows this fact: "Archangel, Nov. 23. Grain seed are our staple commerce with Holland. But the quantity brou down this autumn has been deficient, and fifty-four vessels less than 1832 have cleared out for Holland." This diminution was owing to failure that year already noticed. Russia also chooses to grow and port a great quantity of linseed as well as hempseed.

* The German States which in the beginning of 1835 had joined in t league were mentioned to be—

	INHABITANTS.
Prussia	13,000,000
Bavaria	4,000,000
Wurtemburg	2,000,000
Kingdom of Saxony	1,300,000
Saxon Duchy	600,000
Grand Duchy of Baden	1,100,000
Principality of Nassau	350,000
Duchy of Hesse Cassel	600,000
Duchy of Hesse Darmstadt	700,000
Frankfort Free City	60,000
Other small States	590,000
Total joined	24,300,000

Those which then had not acceded to the union were—

Austria	10,000,000
Hanover	1,500,000
Duchy of Brunswick	250,000
Duchy of Oldenburgh	250,000
Grand Duchy of Mecklenburgh	500,000
Duchy of Holstein and Lauenburgh	400,000
The three Hanse Towns	250,000
	13,150,000

German Papers.

I believe some of these, in the last two years, have adopted it. He over endeavoured to establish a counter-league, but this has been giv up, as the Prussian league will most probably also dissolve, unless co tinued for political objects; for it has been stated that the Prussi government lost by it, in the first year of its working, nearly 3,000,(florins.—Times, 17th November, 1835.

sumption, and therefore needed an importation from abroad. this presumption our enterprising merchants speculated in purchase of large quantities of foreign corn, and lodged m in their warehouses under the bonding system, expecting t the rise of the prices here would allow them to bring ir importation into the public market.*

For this event they have been waiting above three years; although, during this time, we have been subsisting solely our own harvests, and have been increasing in our numbers, and therefore in our consumption, yet in neither of these rs, nor at the end of them, has our own supply been found inequal to our demand as to raise the prices to that amount ich will allow the owners of this bonded corn to bring it o the market.† Our stocks and harvests of our own growth e been so much more than our population has needed, t the prices of corn fell last year, 1836, almost below a renerating amount; and although they have become higher, no signs of any scarcity of our domestic supply occur; token whatever that there is any want of the bonded forn corn. That, therefore, lies still in the warehouses, giving

"Of bonded foreign grain there is not less than 500,000 quarters in ehouses, a quantity equal to the average importations of a long series ears while England did consume foreign wheat; and, of course, a good rve: since England, for the last five years, has exhibited no want of ign assistance in subsisting her increased and rapidly-increasing ulation."—New Monthly Magazine, December, 1836, p. 528. The ntity of foreign corn and grain in the warehouses at the end of 1834 thus stated officially from the Custom-house on 20th December, :—

	Qrs.	*Bush.*
Wheat	627,587	–
Barley	160,100	2
Oats	331,494	3
Rye	5726	7
Peas	8874	–
Beans	42,445	1
Indian Corn	636	8
Buckwheat	33	–
	1,176,897	5
Flour, cwts.	342,576	

"Near a million of capital has been three years set fast in the bonded n.

"The last four years have decidedly shown how nearly equalized is and and supply; even under the continued increase of the population, *e has been found not only a sufficiency, but a superabundance.*"
b.

a demonstration, as long as it is there, that the ratio and pro-
duce of our agricultural food still equal, or, to speak with stil
more precise truth, still exceed the ratio and the wants of ou
increasing population.* This is another proof that the law
of our food and of our multiplication are not in opposition t
each other, but are in steady adjustment and so kindly propor
tioned, that, as I have inferred before, our subsistence is al
ways in advance of our population instead of being inadequat
to it. This bonded corn remains still locked up, as th
spring of 1837 is advancing, because we grow enough with
out it.†

Another fact which indicates the universality of nature'
superabundant produce in this period of our world is the cir
cumstance that, in the Duke of Wellington's campaigns i
Spain, when it was necessary for our commissariat to impor
into that country large and continual supplies of food for ou
army, and often for our allies; notwithstanding so much cor
went from this country as to raise its prices to an extraord
nary amount, yet a large portion of the required supplies wer
also obtained from the harvests of some Asiatic regions an
contiguous isles. Corn was shipped from the eastern port
of the Mediterranean and Egean Sea in such large quantitie
as to enrich the active agents in this new and unexpecte
traffic.‡

With all these facts before us, can we allow ourselves t

* "It is ascertained, beyond all question, that notwithstanding the i
creased consumption, and the harvest commencing three weeks lat
than last year, thus augmenting the consumption by one seventeen
part, there were stocks beyond what used to be considered the averag
of the kingdom at no very remote periods. This fact, taken with a
other, that no foreign corn can have been consumed in England f
the last three years, proves incontestably that a crop a little above t
average *will produce considerably more* than is required to support t
population."—New Monthly Mag., Dec., 1836, p. 528.

† "There are in bond 500,000 quarters of wheat, an amount fully equ
to the average demand for a long series of years previous to 1818, rea
to come forth the moment the averages shall allow."—Ib., p. 529. T
official return was 627,587 quarters.

"The stocks are so far from being exhausted, that we know of far
ers who now hold three years wheat."—Ib., 115.

‡ I have mislaid my note of the authority from which I derived m
knowledge of this curious fact, but I think it was from one of our qu
terly periodicals, and that our consul in Cyprus was mentioned as t
individual who had been zealous in procuring the wanted corn, and h
been one of those who had deservedly profited largely from his patrio
activity.

be disquieted with such an unfounded fancy as that population outgrows its subsistence, or ever has, or ever will! That it never has is visible from the present astonishing numbers of mankind; and this is a pledge that it never will. I again press on your notice that we have no other pledge or certainty for again beholding the sun, or for another summer, than our past experience of their continued recurrence. All the business of our worldly life, and all the attachments and concerns of our social life, are mainly founded on the same assumed principle, that what always has been, in and from the constitution of nature, will continue to be as long as the same system of it lasts. However mankind have multiplied, the subsisting supplies of nature have, from generation to generation, equivalently multiplied with them; and it is because this has been the regular and successive fact that we are here, in the five thousand eight hundred and forty-first year of the world, with larger coexisting populations than ever appeared together on its surface before, and yet with a greater quantity of food in hand than all these augmented numbers need. Instead, therefore, of the Malthusian theory of the contradictory ratios of population and subsistence being a grand discovery, let us rather deem it one of the most fallacious suppositions that ever misled an ingenious and amiable mind. The able and valuable men who still support it will, as they extend their investigations, be in time disinclined to continue their adherence to it.

But you will say or feel, Is there, then, no want—no destitution? Are none in beggary—none without food, or almost starving from not having a sufficiency? I answer, Yes: there are the poor and needy in every land. But this is a different question from that of vegetable nature not producing what the populations of the earth require, and ought never to be confounded with it, although they are perpetually argued and written upon as if they were one and the same. This is a great mistake. They are subjects quite distinct from each other. One—the natural supply—is always a question between human nature and Providence; and my conclusion and certainty on this is, that Providence has always given, and always will give, in the annual produce of his earth, as much as the populations upon it must have in order to subsist. This general sufficiency has never failed wherever due and practicable cultivation has sought for it. The harvests of husbandry

have always been enough for all; and the proof that this is the fact, notwithstanding the myriads or millions that may be in want or penury at the present moment, or at any other point of time, appears in this accompanying fact, that there is everywhere now, in the possession of the other portions of the population, enough for all that need, if distributed as they want. It is not because there is not a sufficient quantity of the alimentary articles on the earth that any are in want; it is because they have not the means of purchasing or obtaining what they require from those who possess. If they had the trading medium, they would find in the public markets everywhere the sufficiency they desire. Poverty and want are, therefore, the topics of an individual question between man and man, or between each person and society, and not between mankind and Providence. This important topic shall be the particular subject of a future letter.

LETTER XXX.

Grounds for a Rational Assurance that the future Multiplication of Mankind will find sufficient Subsistence.—Provision made in Nature for this by the quantity of Ground left hitherto uncultivated.

My dear Sydney,

That there are now sufficient articles of subsistence for all the inhabitants on the earth, in their actual possession, is a circumstance which could not have taken place unless the ratios of food and population had been concurrently acting and advancing together, with a similarity of increase, instead of a dissimilar or contrary progression. But as the same facts were as practically true in the reign of William the Third as now under William the Fourth, and equally so under the Tudors and their predecessors, and, indeed, in all the anterior periods of which history has transmitted an account, we may assume that there has been a constant adjustment established and effectuated between the natural supplies of our food and the natural enlargement of our population; and that it was the original, and has been the continued plan of our creation, that this result should always accompany our earthly existence.

The experience and language of the past become thus an assuring prophecy of what the future will be in this respect to us, and take away all reasonable grounds of doubt or uncertainty about it; because, before mankind can become too numerous for their food, this adjustment must be dislocated; the laws and agencies which have hitherto produced it must be suspended or abrogated; and the very plan on which the course of nature and of human life has been carried on ever since the deluge, must be fundamentally altered.

Grant only that there will not be this mutation, but that the same constitution, and order, and succession of nature as to our food and population will continue to be as they have hitherto been, and we are then secure from the disaster and misery of an overpeopled and starving world. For at no ascertainable point of preceding time has the earth been incompetent to support the populations which have inhabited it; on the contrary, it has always yielded the required supplies, whenever it has been resorted to, by easy and practicable cultivation, to produce them. It has, up to the present moment, been able to maintain every generation which has dwelt upon it, although the human race have been increasing from six parents to 800 or 1,000,000,000.

But the earth could not have thus increased its nutritrous vegetation, in continual proportion to its enlarging population, unless it had been created on the plan and purpose that it should do so; for there must have been provided means and agencies according to a previous design in order to cause such an effect; and there was no reason but the Creator's will that there should be corn, or alimentary roots and plants, as well as roses, elms, grass, or thistles on its surface. What was meant to be material of our nutriment has been specially devised and intended to be so; and to be always as long as man should need them; for it would be imputing folly to a Creator to suppose that he meant the human race to be on the earth for several thousand years, in a series of generations, all needing food, and yet so framing nature as only to yield subsistence for a portion of them or for a few centuries. It will be an equal arraignment of his intellect to imagine that, meaning and causing population to multiply as long as man is on this globe, he has not also so constituted his system of our subsistence that this shall continue to increase its supplies in due proportion to our multiplying in number.

Otherwise, as we have already suggested, he puts himself into contradiction with himself. He wills on the one hand what he does not will on the other; and this would convert creation into a chaos, and be incompatible with every rational notion of an intellectual Creator, and with that skill and judgment which all nations and ages have descried and lauded in the rest of our mundane system.

On first principles, therefore, independent of all calculations on the facts around us, we may be sure that there is no more reason for our doubting or disbelieving that our posterity will always have a competent subsistence, than there was for our forefathers, in the days of Queen Anne or of Queen Elizabeth, anticipating that we should be starved. The apprehensions raised by the Malthusian theory resemble those which agitated so many of our political reasoners during the reigns of all the four Georges, that every augmentation of our national debt would be an advance to national ruin. We see, by their parliamentary speeches and pamphlets, that this calamity was feared, and confidently predicted in every generation; and I believe, with great sincerity of thought and feeling, myriads, meaning no error or evil, in the days of George the First, would, from their ideas and materials of judgment, have pronounced it to be impossible that, before the third sovereign of that dynasty should die, our funded system should increase to £800,000,000, and yet the nation be more prosperous than ever. I do not arraign their understanding for their mistaken anticipations. New events and causes have come into action since their day which they did not foresee, and therefore could not reason on. This will always be the case with every theory in the succeeding periods of our world. Science, arts, and nature itself will be always evolving new facts and operations, which will make all anticipating reasonings and measures concerning them more like fallacious speculations than serviceable precautions. We shall shackle posterity more than we shall assist it by such provisionary activities.

New facts and phenomena, bearing strongly on their subsistence, must be expected to occur to our succeeding generations as they have arisen to ourselves since the parliamentary regulations of the sixteenth and seventeenth centuries. The past will always be education and instruction to us, and no wise man will omit carefully to study it. But the future will be,

every year, less and less an exact copy of it. Many general outlines of likeness may remain, but the individual features, mind, and habits will be always changing. If, then, our following population should enlarge in proportion to us as much as we have done in comparison with our state when the Stuart dynasty closed, they will find their subsisting resources increase from new means, agencies, and circumstances, which they will create or discover, precisely as we have been doing from the accession of George the Second to the reign under which we are now flourishing, with abundant subsistence issuing annually to us. The superior causes from which these arise —the Divine wisdom, care, and benevolence—never change; and on these we may always rely, as eternal principles which never vary, and which never will be ineffectual to us.

Let us not, therefore, act from mistrusting apprehensions more for our posterity on this subject than our ancestors did for us. Let us legislate on existing evils when necessary, but not on possible ones, and never on alarmed imagination. Confront danger bravely when it comes; but let us not fight with dreams and spectres of the imagination which have no present reality. Our predecessors wisely left us, as to our food, to nature, to Providence, and to ourselves. Let us, in like manner, leave our descendants to their own resources, talents, and exertions about it. They will have the same nature and Providence around them as all mankind hitherto have had. From these they will receive as satisfactory benefits as preceding times have enjoyed. They will not have less ingenuity, enterprise, and industry than ourselves; but they will have more knowledge, more exercised mind, better regulated habits, and a more enlarged and enlightened judgment than even we possess. With these means and advantages they will do better for themselves than we can do for them; and will only smile at our apprehensions that, with such a God and such a system of external nature on their side, they should be doomed to perish by famine because they married and multiplied, as they were created to do, and as we have, in every period, so happily and prosperously done.

Let us, then, repose calmly on the fact, that society has hitherto been supplied, regularly, from the natural system of things, with the food it has required. We have, in this advanced period of the world, enough for our present wants; and all the providing causes from which this sufficiency has

resulted to us are still in their efficacious operation, and discover no signs of diminution, of general failure, or of distressing insufficiency. The same benevolent plan, and all its associated purposes, are in steady execution; and the true principle of our trust and hope has been delivered to us from the highest authority—"Your Heavenly Father knoweth that you have need of all these things." As long as he means us to exist on earth, nature will be made to yield the supplies which that existence will require. We must be expunged from his creation before the result can be otherwise. His laws and processes for our nutrition will not fail until we are to cease, and then we shall no longer need them. Let us, then, not look with an evil eye or a fearful mind on our increasing population; nor seek or desire to repress it, nor devise or pursue any measures for this purpose, to the injury or inconvenience of our present contemporaries of any country or class; and, least of all, of those who are in themselves the most helpless and powerless, and unable to plead for themselves. On the Malthusian hypothesis, enlarging population is an evil. By nature it is given, and in revelation it is represented as a blessing. The more largely the subject is studied, its benefits will be more fully seen, and more indisputably appreciated. Why, then, should we be so unjust or ungrateful to its Author as to deem it a malediction? Every new-comer will have a right to protest against our good sense or good feeling if we do so; and will deny our right to regard him as an intruder or an annoyance. By his superior improvements he will show that he has a greater right to the inheritance and enjoyment of a life on earth than ourselves, if merit, qualities, or attainments be the criterion. We have this advantage over those who preceded us a century ago. Our successors will be as much more progressive beyond ourselves. They will come into this world as we have done. If they have no right to emerge into birth, neither had we. Their natural title to existence is, therefore, the same as ours. They will be, from their additional improvements, a species of the human race superior to what we are. Instead, therefore, of attempting to suppress their appearance, or to reproach them for it, we ought always to welcome their visit, and cordially assist to train and guide them to that higher gradation of our common nature which they cannot but exhibit. But the increase will certainly make due measures

necessary to be adopted, in order to put all who are without inherited provision into a proper position for attaining, by proper means and conduct, the maintenance they will need.

There is such an apparent certainty that the new generations which are to arise will be a series of transcending gradations to what we are and to each other, that I cannot but rejoice at the symptoms of our multiplication and of its probable continuance. They must surpass us in knowledge, because they will be continually acquiring new accessions of it in every science, in every path of inquiry. They cannot but do this. The mind, as one writer truly said, cannot unknow; and the more it knows, the more it loves knowledge, and experiences pleasure from it, and, therefore, will always seek to acquire and enlarge it. Knowledge cannot increase in any one without enlightening his mind, and, by giving him more copious materials and wider views for judging upon, must enlarge his judgment. But augmentations of knowledge and judgment must act upon the conduct, if not fully, yet always in some proportion, to their amount. Every one will find this result in himself, and a generation will act more rationally, in most things, with increased knowledge and judgment, than it could do without them. Hence moral conduct cannot but advance as experience increases, and its resulting good sense becomes more common, and will also not only become most profitable to every one, even in worldly things and circumstances, but will be perceived and felt to have this issue, and will be, therefore, practised from self-interest in the selfish, as well as from nobler impulses in those who love and seek moral beauty, as soon as they discern and understand it. A new spirit of higher moral bearing has already risen in society;* our successors may have their vices and errors, but these will have beneficial differences from ours, and will not prevent that augmenting melioration which will be always operating to lessen their power and consequences. The

* "The age is doubtless past when ridicule or danger is to be encountered in the defence of truths eternal and immutable; and the time, we hope, will never arrive, when high and honoured names shall be again associated with all that is unsound in morals and mischievous in skepticism. *A brighter era has now dawned*, in which genius will fulfil its highest destiny; and all that is brilliant in talent and elevated in virtue be marshalled in the cause of our moral and religious interests."—Edinb. Review, Jan., 1837, No. 130, p. 302. I honour the feeling and the discernment which dictated this passage.

more enlightened must, on numerous occasions, think and act more rightly than the unenlightened; the clearsighted must see better than the blind or dimsighted. They cannot do otherwise. They might be more mischievous, if mischief would be serviceable; but, as this can never be the case beyond some temporary effect, nor without punishing reaction or results on themselves, right conduct and wiser mind will increase as population continues and enlarges, but will never be so great or operative when that is stationary as when it multiplies.* But all increasing national populations must, like all individual children, have a proper juvenile education. No civilized society can be comfortable without this; as the omission of it would leave those who are without it to grow up with the minds and feelings of the uncivilized communities.†

* Our good Bishop Hall was in the Netherlands between 1600 and 1604, and some facts which he mentions of what he saw strongly show the improvements which have accrued to them with their increasing population. Of LIEGE, he says, "The streets are moist with blood, wherein there is no day, no night that is not dismal to some. No law, no magistrate lays hold of the known murderer if himself list. For three days after this fact, the gates are open and justice shut. Private violence may pursue him, public justice cannot. In every corner is a maumet (an image); at every door a beggar; in every dish a priest."

Of SPA, now such a fashionable resort, he remarks, "a village famous for her waters of iron and copperas. The *wide deserts* on which it borders are haunted with three kinds of ill cattle, freebooters, wolves, and witches, though these last two are often one." It was one of the fancies of the day that the wolves which worried persons in the towns and villages were human evil beings who assumed that shape. This was a theory sufficiently absurd; but the fact that the country was so uncultivated as to have these animals, and that they were numerous enough to do much mischief, is not lessened by the hypothesis adopted to account for it. We may, therefore, believe what he saw, though not what he thought. "We saw a boy half whose face was devoured by one of them near the village"—near the now celebrated Spa! He adds,

"Along our way, how many churches saw we demolished, nothing left but rude heaps! If there had been no Hollander to raze them, *they would have fallen of themselves.* Churches fall and Jesuits' colleges rise everywhere. There is no city where these are not either rearing or built." These circumstances are mentioned in his "Life."

† No sentiments can be more true or useful than the concluding remarks of the English Poor Law Commissioners: "We are perfectly aware that, for the general diffusion of right principles and habits, we are to look, not so much to any economic arrangements and regulations, as to the influence of a moral and religious education. As soon as a good administration of the poor laws shall have rendered further improvement possible, the most important duty of the legislature is to take measures to promote the religious and moral education of the labouring

It appears to me that populations cannot now multiply without improving. The fact of the multiplication carries with it the evidence of the improvement; for, without the agency of improving causes, nations cannot enlarge. They have never multiplied without such progression; and never begin to multiply until the improving action commences which causes and accompanies their increase. All my historical recollections lead me to these deductions; and, if they be just, the multiplication of every population must be a good to human nature, and, therefore, a pleasure to its great originator.* That population can increase, without evil to ourselves or to our posterity, even from the natural means which are now in existence, we have satisfacotry grounds for believing. I will state, briefly, some of the facts and reasonings on which I entertain this opinion.

But in these remarks I beg you to remember that I am considering the subject now as between mankind and their Creator only. The subject as between man and man will be an after consideration. From him will come always enough for all; this is the point which I am at present contemplating.

Two things are, of course, necessary for all populations—land to cultivate, and alimentary substances to raise by the cultivation. If, then, we are to multiply beyond our present

classes." The first four signatures to this report are, the Bishops of London and Chester, Mr. Sturges Bourne, and Mr. Senior.—Report on the Poor Laws, p. 362.

* I may refer to the present state of Ireland, as stated in the speech of Lord John Russell, on 13th February, 1837, on detailing his plan for the introduction of poor laws into that island, as illustrating some of the above remarks. He said—"From the statement of the Poor Law Commissioners, there were nearer three millions than two millions of persons in Ireland who were in a state of almost absolute destitution; a large proportion of the Irish population practised mendicancy during a considerable proportion of the year; the farmers were obliged to contribute to their relief; and it was the practice of the Irish farmer to set aside a portion annually of his potatoes for the mendicants who came to his door." Here we see, that although one third of the Irish population were in a state of destitution and mendicancy, yet the farmer had the potatoes to give them. Thus the food had yielded enough for all as between man and nature. And that the great multiplication of the Irish population has been accompanied by improving agencies, we may also infer from another passage in his lordship's very able and comprehensive speech. "He must also look to the GENERAL IMPROVEMENT which he was informed, *in every quarter*, was now proceeding in Ireland."—Stand., 16th February, 1837. But his whole speech shows that multiplying populations require new and wise measures as they arise. Enlightened policy may be in these a great benefactor to society.

numbers, it is essential that there should be ground for the new multiplications to till and fertilize. Our first question, therefore, will naturally be, Is there on our globe territorial surface now unused or unoccupied on which an additional population may exert its productive industry? The geographical answer to this inquiry is, that there is on the earth plenty of soil now lying uncultivated, from which future numbers may derive the subsistence they will need, as long as for any useful purpose we need extend our calculating foresight; and this appears to me to be another instance of the Divine government of our population, and of its continual adjustment to its needed subsistence; for large portions of the earth have been kept unoccupied by agriculture until this period, when the new laws that multiply population are brought into action, and make more available surface necessary for its use.

It was shown, in a letter of our last volume, "that one sixteenth or seventeenth part of our present dry land would be quite enough of available ground to nourish, at one time, the greatest amount of human population which has hitherto been permitted to be, contemporaneously, upon the earth, all living as our countrymen do.* Now, from this fact, we find that there is land enough to subsist sixteen or seventeen times more than all our existing populations amount to, even in the present low state of general cultivation and produce. This truth gives to any alarm on this subject the character of absurdity. It was also mentioned, that it had been calculated, on very probable grounds, that CHINA ALONE could, if properly cultivated, be made to supply at least five times the amount of all the human race now on the earth, and apparently many more.†

Let us pause a moment to reflect on these circumstances; for they lead us immediately to observe that the Creator, intending, in this age of our world, to cause his human race to multiply more largely than they have hitherto done, has hitherto kept them in this smaller proportion to the habitable surface of the globe, in order that there might be land enough

* Sacred Hist., vol. ii., Lett. XXI.

† It was there shown that China contained 640,000,000 of acres which might be cultivated, and that an acre of rice would afford a supply of rice for ten persons for a whole year in the southern provinces, and five persons in the north. Rice is the natural food of the Chinese. So that the agricultural produce of China might be increased, even by their present mode of cultivation, so as to maintain from 3000 to 6,000,000,000 of people.

for their new generations to occupy and cultivate when his agencies for their present multiplication should be ordained to operate. Hence our species may fearlessly multiply from one thousand millions to sixteen times that number before they will have occupied the ground which now lies ready for their labour. But, large as China is, yet her soil may be supposed not to be more than one tenth part of the surface of all the rest of the continents and islands of our planet; and, therefore, if she should be made to subsist five times the amount of the present human race, the inference will be, that mankind may go on multiplying to fifty or sixty times their present amount before all the surface would be fully cultivated. But we have no authority to suppose that the human race will be ever carried to this extent, nor that the present world will last long enough for them to do so. Revelation assures us that a period of the dissolution of its present form has been ordained to arrive, though it has discouraged the vain attempts of man to fix the time of its arrival, by declaring that none but the Almighty Father yet knows when the awful consummation will occur. But, as many centuries will yet revolve before mankind will find the land of the earth to be insufficient for their maintenance, we need not carry our thoughts so far. It is enough that many intervening centuries must take place before mankind can fully cultivate the whole of their present surface, for us to dismiss all solicitude about their subsistence, from any want of land to raise their harvests from.

The cause that so much soil remains in this uncultivated state, in so late an age of the world, is, that mankind have not hitherto wanted more than they have tilled and made use of. They raise what their existing numbers require, and they will not do more. Demand is always the ruler of cultivation, and its cause. Men will not labour for nothing. No man will till and grow corn merely to see it sprout, and then let it rot upon the ground. It will nowhere be produced until it is wanted, and only as it is wanted. Nothing but the gradual increase of population has raised such a quantity of food as the general harvests now produce; and these being more than the present numbers actually consume, since most farmers have some stocks by them, more land will not be cultivated until a greater multiplication of persons arises to need it. What they want they will work for and produce, as long as there is land to till and as tillage will bring harvests.

Egypt has been surprisingly improved by its present ruler, Mehemed Ali. He has, for his own sake, greatly encouraged both its agriculture and manufactures, and made himself the proprietor of their produce, in order to use what he wanted, and to sell the rest. Yet, though he has obtained supplies from it far beyond their former amount, one of our latest travellers declares that there might still be raised to maintain four times the amount of its present population.*

That a minor portion only of Poland, though a grain country, and one of the supplying granaries of the Continent, is in proper tillage, has been already mentioned;† and Spain and Portugal are in the same neglected state.‡ But we need not pursue details of this sort. The general fact is well known, that in every kingdom of Europe large quantities of land are left uncultivated. We may confine our attention to our own islands in this respect. It has been calculated that, even in these, if every part that was susceptible of beneficial husbandry were tilled, enough might be raised to feed 120,000,000 of people; that is, five times the amount of their present large population.§ On another computation by a practical agriculturist, it was remarked, that our usable soil could be made to support 300,000,000 of persons on vegetable diet, or above 100,000,000 on a plentiful aliment of both flesh and vegetables.‖ And one of the most prominent Irishmen of the present day has asserted in parliament that his country could produce ten times more than is now raised from it; of

* Mr. Carr, in 1835, states Egypt to contain now 2,500,000 souls, of whom 240,000 are in Cairo, called by the natives Mesr. He says, "How different is the state of Egypt now from what it might be! possessing a population of scarcely more than one quarter that it might be rendered capable of sustaining."—Carr's Account of Modern Egyptians.

† See before, Lett. XXIX., p. 286.

‡ See before, p. 289.

§ The statement was made in the "Edinburgh New Philosophical Journal," for September, 1828, that the United Kingdom contains 74,000,000 of acres, of which 64,000,000 might be cultivated. It was reasoned, that half an acre would annually yield corn enough for one individual, and that one acre would feed a horse. Hence, that our islands could maintain 120,000,000 people and 4,000,000 of horses.

‖ "There are in cultivation, or capable of it, 33,000,000 of acres in England, 9 in Scotland, and 16 in Ireland; in all, 58,000,000 of acres. Every acre will support a family on vegetable diet; but to live on both flesh and vegetables, three acres must be used in order to have plenty. At this rate, our United Kingdom might support 300,000,000 on vegetable diet, or 100,000,000 on flesh and vegetables."—Mark-lane Express, 8th September, 1834.

course, could support ten times its present copious population.*

If we once ascertain the number of acres in a country, we can reckon for ourselves the numbers it would sustain; for a quarter of wheat can be made into so many loaves as to supply each individual with two and one third a week.† This is more than I use, who, you know, live principally upon bread. But an acre of wheat, in its ordinary produce, will furnish enough to make three times this quantity. So that three persons, whose diet is like mine, could subsist as comfortably as I do now on the produce of a single acre. But the populations of India and China subsist on rice, as we do on wheat; and an acre of rice, we find, will sustain from five to ten persons for a year, and the people of these countries are from one third to one half of all the numbers now on the earth.

Carry these ideas round the world, and assume that the earth would nourish as many inhabitants as quarters of wheat could be raised from it where wheat is consumed, or ten times as many as there would be acres of rice in cultivation where this grain is eaten, and you will feel that there can be no room for disquietude at the multiplication of population for any length of time to which we need extend our prospective anticipations. Every additional person will require that an additional quarter of wheat should be raised; and, for every three new human beings to have this, an acre must be put in tillage at its common produce. Thus, if the population be enlarged in ten years by 1,000,000 more inhabitants, 1,000,000 more

* On the introduction of the Irish Poor Law Bill, Mr. Daniel O'Connel is reported to have said: "It had often been admitted that Ireland was a country capable of two or three times its present cultivation. But there was no part of Ireland, in fact, which was not capable of being cultivated to a degree TEN TIMES more productive than it now was. There was at least one fourth of it waste land, which had never been broken in, and which was quite capable of cultivation."—Standard, 14th February, 1837. I observe, also, that, on the same occasion, Lord Howick remarked: "It had been truly said that there was no part of Ireland which might not, by increased skill, be made as productive as the other; and one fourth of the land remained at this moment unimproved."—Ib.

† "The imperial quarter of wheat weighs 496 pounds, and, in the hands of a good baker, will turn out 124 four-pound loaves; and, as three quarters per acre is the fair average return of the corn lands in England, an acre will produce sufficient grain to make 360 loaves, now selling in London at eightpence halfpenny each."—New Farmers' Journal, 12th February, 1834.

quarters of wheat must be raised, either by increasing to that amount the productivity of our present land in cultivation, or by bringing 330,000 more acres into cultivation, if we nourish them from our own soil; but if we have now ten times this quantity of producible land yet uncultivated, we see that, at this rate, we may go on multiplying, as much as we are now doing, for a hundred years, and still grow corn enough in our own islands to feed them. The rice countries would allow two or three times this quantity of population: so abundant are the means now visible for meeting the largest increase of population to which we have any just occasion to advert. We can reason still more exactly on this point as to our own islands.

England contains, in its whole area, about 32,000,000 of acres.* Of these, 3,250,000 have been deemed incapable of improvement; and of the remainder, nearly 3,500,000 of acres are in an uncultivated state.† Now this quantity of land, if put under efficient tillage for wheat, would, according to the statement we have just reviewed, provide sufficient food of vegetable diet for 10,000,000 more inhabitants in England alone; a number not likely to accrue for forty or fifty years at least, though we should multiply further in our late accelerated ratio.

But if we reason on the amount of land not at present in

* "The area of England is 50,387 square statute miles, exclusive of Wales, consequently 32,247,680 acres." The separate enumerations of the contents of each country come to 31,770,615.—Rickm. Enum. Abst., vol. ii., p. 832. Mr. Cowling's calculation makes it 32,342,400 acres. On either calculation, the amount would be nearly 32,000,000 of acres.

† Mr. Cowling, a civil engineer, in 1827, delivered to a Select Committee of the House of Commons his statement on this subject, which he said was the result of his personal examination, having examined 106 of the counties of both islands, and partially visited the other 11. His account was a detail, of which the following is a summary:—

	Acres cultivated.	Acres uncultivated, but improvable.	Acres unprofitable.
England	25,632,000	3,454,000	3,236,400
Wales	3,117,000	530,000	1,105,000
Scotland	5,265,000	5,950,000	8,523,930
Ireland	12,125,280	4,900,000	2,416,664
British Islands	383,690	166,000	569,469
	46,522,970	15,000,000	15,871,463

Mr. Porter, in his compendious volume of "The Progress of the Nation," has inserted Mr. Cowling's detailed statement, p. 173–177.

ry, but which is susceptible of cultivation, in all Great and Ireland, we find that there are no fewer than)00 of acres in this waste but improvable condition; refore, that we have soil enough yet unused which e made to provide 45,000,000 more people in our two with vegetable food from our own resources. I sub- ou, that we may believe that, if such an augmentation ver take place in our nation, no generations for which l have any personal interest will be in being. We d enough to occupy and feed all that will come for a g time; and this makes it quite unnecessary for us to e on the results which may take place when every n full cultivation.*

e land now in cultivation in our islands, about two y are in tillage; the rest are in the grassy state.† Of hich are tilled, a proportion only is in culture every wheat. Full as much has been considered to grow l beans, and the remainder barley.‡ At present we ast quantity of horses, and each horse is said to re- ght times the soil and substance which would supply

ummary in the preceding note presents the whole land of the lands, cultivated, waste, and unprofitable, as amounting to acres; of which about one fifth only is classed under the use- cter. The cultivable contains 61,522,970 acres, which, at three ings per acre, would feed 184,568,910 individuals. To this hen, we may safely multiply.

owling thus distinguished the ground that is now in cultiva-

	Arable and Gardens.	Meadows, Pastures, and Marshes.
	Statute Acres.	Acres.
gland	10,252,800	15,379,200
les	890,570	2,226,430
tland	2,493,950	2,771,050
and	5,389,040	6,736,240
tish Islands	109,630	274,060
	19,135,990	27,386,980

Cowling's Progress of the Nation.

r Young believed that, in England, there are usually 3,000,000 very year growing wheat, as many producing barley, and as red for oats and beans. Mr. Comber agreed with him as to the ast of these articles, but thought that there was not so much bar- this point I am incompetent to judge. Some think that more ow raised; and, as we produce wheat enough for our own use, t be either more than 3,000,000 of acres planted with it, or each , on an average, yield above three quarters.

food for a man.* This has occasioned some to urge strongly that the steam mechanism should be applied to agriculture, not only that the ground which now provides what they need might be applicable to raise more food for the enlarging population, but also from the diminution of farming expenses which would follow from its adoption.† There is such a spirit of enterprise and intelligent ingenuity among our countrymen, that we may expect that all improvements which can be invented and brought to bear usefully on this point will in time occur as our population enlarges, because that increase will bring more acting minds into existence, and stimulate their activity. It is gratifying to perceive that the attempt has already begun and been found practicable.‡

In these facts we may discern a certainty that the adjusting principle between multiplication of population and multiplication of food will act as steadily and as efficaciously hereafter as it has been operating hitherto; and that due provision has really been made that it shall have this effect. We have a further assurance of this result, and further means of procuring it, in the other element of the system of our maintenance; I mean, in the very articles which we consume as our food.

Two principles have been pursued by our Creator as to the substances which are to be our support, with an express view

* According to the parliamentary returns in 1728, the horses running in coaches in Great Britain amounted to 178,841; and a writer in the "New Farmers' Journal" of 1st November, 1833, considers that all the horses that are exclusively employed in drays and draughts would, with the coach-horses, amount to 600,000. To these are to be added those which are kept for agriculture and pleasure. "It seems admitted that each horse consumes what will support eight individuals." From this he reasons, that, if out of the whole number, 600,000 should be superseded by steam carriages, their absence would enable corn to be raised for nearly 5,000,000 more people.

† We must not suppose that all the expectations of sanguine calculators will be realized; but it is as well to know them; because they excite experiments which, if not verifying what is promised from them, yet often elicit many new utilities. Thus, "Mr. Brown offers statements to prove that the horses now used in husbandry alone are maintained at an expenditure of 30,000,000*l.* yearly. He calculates that, in ten years, the profit in favour of a steam-plough over a horse-plough would amount to 775*l.*, even allowing all expenses on its first introduction."—New Farmers' Journal, 1st November, 1833.

‡ Lord Henniker stated, on 8th September, 1837, at the East Suffolk agricultural dinner, that he had received a letter from a friend in Lincolnshire, mentioning that in his neighbourhood they *had already a steam plough*, which would harrow thirty acres and plough eight acres per day. —Standard, 14th September, 1836.

o our continued multiplication; and these are, that they shall e very numerous, and that their productive system shall have power of increasing fertility, both from natural agencies and om human cultivation, whose limits of improvability cannot et be defined. In both these laws we have a security gainst being famished by augmenting numbers, which we ught never to forget. The food of the animal creation is ery simple, commonly some one or two articles only, and arely extending beyond. But, for mankind, a diversity of edble substances has been created, and many such have been sed, and are still, in many countries, the most convenient or referred food. As it will not be incurious or unuseful to otice what is taking place in the world in this respect, the ariety thus provided and applied, and the increasing productive power of some articles, shall be the topic of the ensuing etter, as further elucidating the Divine system in our human ife, and the abundant provisions for its comfortable support.

LETTER XXXI.

e Principle of Animal Nutrition is, that it shall arise from what has nd Life within it.—Animal and Vegetable Organizations prepare all uman Food.—Facts to show that Mankind can and do Feed on all e Classes of the Animal Kingdom, and find Nutriment from all.

My dear Son,

aving thus seen that there is ground enough still everye uncultivated on our surface to supply a greater multiion of our race, and a longer series of its generations, we have any reason or necessity now to advert to; and Providence has kept the earth in this condition, as if to and supply its human race at that period when it intendenlarge and spread their number, let us now consider t has created to be the needful aliment of mankind, or onvertible into their nutritious support.

he five great divisions of material things—the aerial, eous, the mineral, the vegetable, and the animal—the only contain the articles of human subsistence. It is kable fact, that animal life is supported only with that

which has had life in it. Vegetable existence arises
the mineral kingdom, under the agencies of the aerial a
aqueous, on its provided organization and principle o
Plants, therefore, are not indebted to any preceding v
for the growth or continuance of their own; but no a
can live on the influences alone of the three compartme
nature which sustain vegetation. They require to be
ished by what has had life in it, and therefore either by
table or animal substances. This is remarkable, and b
our power of explanation. If there be any exception,
in the microscopic world; though as the seeds of some
are invisible, and, by the mould which follows, damp a
to be wherever moisture is, even the living molecules,
our artificial magnifiers reveal to us, may derive their su
ence in the same manner as all other animals, from veg
cryptogamia or from each other. The chymistry of the
principle in plants, in functional actions, seems to be r
sary to put the material particles of the mineral world
form our food into that condition, combination, and d
bility which will be subservient to animal nutrition. Th
at least, is certain as to ourselves, that we can live o
what has been a living and organized being, either as pl
animal. We have not yet discovered the art of conv
azote, carbon, oxygen and hydrogen, lime, or clay, or
into nutritive matter. The vegetable principle unive
has the power of effecting this, by its diversified organiza
into its own compounded substance, and this, so mad
comes our food. Whether mankind, who now, by
Crosse's experiments, have attained the power of crystal
matter into gems, and of reviving insects or infusoria b
aerial electricity, will acquire the knowledge how to i
the vegetable process, and, like this, to put the materia
ticles of our surface into an alimentary condition for ou
no one now living can either affirm or deny. It is not i
sible, nor is it more unlikely than the galvanic metalli
of the earths and alkalis by Sir Humphrey Davy was ar
to his experiment, or the crystallizations of Mr. Cross
fore the last year, 1836. If science should ever attain t
vegetation in this respect, then our population might d
themselves as fast as Mr. Malthus supposed; for subsis
then would, like the air and water, be so common and s
curable as to be, perhaps, no more valued than they are.

this facility of maintenance would inevitably change the present fabric of human society, and most of its employments, institutions, enjoyments, desires, and habits. If it were possible, from the abundance of means under our present system, that our population should increase beyond their supplies, it might be then the will of our Creator to lead the human mind to some discoveries of this sort. If creation abounds with wonders, so do the investigations, the capacity, and the powers of the human spirit, whenever the Divine influence is applied to assist and guide them; for this I believe to be the secret agent and leader in all our grand discoveries. The compass, gunpowder, printing, the cotton-mill, the steam-engine, and other improving inventions which have so much advanced society, came each into our apprehension and use at the periods when they were most beneficial, and could be made most availing, as if a supreme intelligence had successively suggested them. But leaving all these eventualities to time and its Sovereign, we, at present, like all our predecessors and contemporaries, must seek our food from the elaborations and products of vegetable and animal chymistry. On these alone mankind have hitherto subsisted; and it will not be uninteresting or uninstructive to observe how our fellow-creatures select and apply them for their nutrition and gratification. We will begin our survey with the animal classes that are used as food.

It is not the largest part of human populations that now live mostly on animal diet. The wilder nations of the earth, either in the hunting state, like the North American Indians, or in the pastoral state, like the Caffres, and other Africans, and several Tartar tribes who domesticate cattle, subsist principally upon it. But it is too difficult to be acquired when the animals are at liberty, and too costly to be reared where they are tamed and confined, for all to have it ready and in sufficient quantity for daily repasts. These require what can be kept at hand, and for a long time unspoiled, and be also divisible into such smaller portions as the occasions for using it demand. Animals must be quickly consumed, unless they can be dried or salted; and therefore animal diet cannot be the general food of any people after they become numerous and begin to adopt the civilized habits. But it is used everywhere in some proportion or other; and all the orders of the animal kingdom have been and are, in some region or other,

made the subject of human mastication. Quadrupeds, fish, the phocine and cetaceous animals, the amphibious kinds, birds, reptiles, insects, worms—all are taken and enjoyed as a pleasure, as well as aliment, in some country or other.

The cultivated nations confine themselves mostly to cattle, sheep, kids, and swine among quadrupeds; to their domesticated birds, to that selection of the wild ones which they pursue as game, and to particular species of fish. They generally avoid insects, worms, and reptiles, and the rest of the animated kingdom. To this, however, there are still some exceptions in Italy, even at Rome;* and as to frogs, at Vienna and elsewhere;† the Spaniards of South America like snail soup,‡ and the Portuguese there use shrimp pies and fried ants, which one of our medical countrymen applauds.§ As there is no more natural reason for using one of these than for the other, it is perhaps habit and taste only which decide on what shall be our liking or aversion.

Elephant flesh is used in West Africa, on the Niger, and that also of the hippopotamus, but neither was pleasant to a European palate.‖ Monkeys seem to be a favourite food in many parts, though their resemblance, when cooked, to children, must always make them displeasing to any cultivated

* At Rome, in March, 1820, the writer says, "Passing through the market this day, we saw things exposed for sale which we should hardly suppose human creatures would choose voluntarily for food. There were baskets of frogs and shell-snails. These were crawling about and pushed back by the boys. The frogs were skinned, and looked white, like chickens. On the stalls were owls, vultures, kites, bitterns, tomtits, cats, hedgehogs, ravens, and sharks. Some days ago our cook sent us up a hare at dinner with the paws, to prove that in was not a cat."—Narrative of Three Years' Residence in Italy, p. 161.

† At Vienna the frogs are kept and fed in tubs in their cellars, to be more fit for their table cookery.

‡ At Monte Video, Mr. Webster mentions, "that large quantities of snails are sold in the market, and are used for making soup."—Voyage in Chanticleer, vol. i., p. 77.

§ The same gentleman remarks, in the Brazils, at Rio Janeiro, "The shrimps are very large, and, when made into pies, are an excellent dish."—Ib. 51. "Ants are so large that they are fried and made into a delicate dish."—Ib.

The Arabs revolt at shrimps as much as we do at ants.

‖ At Boossa. "We have received from the king a dish of stewed elephant's flesh, and another of an hippopotamus, a short time before caught in the Niger. This was rank and fat, more like pork than any meat we know; yet it is considered delicate and delicious eating. Elephant's flesh, unless very young, is almost uneatable from its toughness and rancid nature."—Lander's Travels, vol. ii., p. 196. So in Burma, in the East Indies, Captain Low says, "We got on this coast elephant's flesh," &c.—Journ. R. A. Soc., No. 4.

mind:* an English traveller rather liked their flavour in South America.† Badgers were given as a present from one of the royal wives in Africa.‡ Buffaloes are food like our cattle wherever they are met with, and horseflesh was used by our Anglo-Saxon nation, by some Scythian tribes, and by modern Tartars. Dogs cooked seem to be great favourites in several places, especially in the Sandwich Isles.§ Here they are bred for that purpose.‖ In the Arctic regions the bear is made an article of food, but on English sailors it was found to produce unfavourable effects, and particularly in a removal of their outer skin.¶ The natives of those parts are not so affected by it,** but such a result is a strong indication that our

* Rio Grande, Africa. "The natives eat the large-wigged monkey, which they consider as a great delicacy."—Capt. Owen's Narrative. On the river Amazon, at Sion. "The Indians who returned from the chase had lived eight days on the flesh of monkeys."—Dr. Poeppig, Travels in Chili. At Burma, "Monkeys are also eaten."—Captain Low. At Port Spain, in Trinidad, "Monkeys are sold in the markets, and eaten by many as a delicacy."—Welsh, Voy. Chanticleer, vol. i., p. 274.

† "Among the Indians on the Huayabamba, monkeys seem to be the principal article of their animal food. We saw great numbers of these hanging up, dried, in most of the houses; and they formed no inconsiderable portion of our food till we reached Sarayacu. At first we felt some repugnance to this diet, but habit and necessity got the better of it; and, when accustomed to the meat, we found it by no means disagreeable."—Symth's Narrative of a Journey from Lima.

‡ "The king sent us a turkey, and one of his women presented us with a roasted badger."—Lander, vol. i., p. 232.

§ In the Sandwich Islands, in their feasts, the flesh of the dog constitutes the principal meat. "I have seen nearly 200 dogs cooked at one time; and during the last visit which the late King of Tahucu and his queen paid to the governor of Hawaii, a feast was prepared by him, at which Anna was present, and counted 400 baked dogs, with fish, hogs, and vegetables in proportion."—Ellis's Hawaii, p. 348. They are fond of dogs also in West Africa.—Lander, 8.

‖ "Numbers of dogs, of a rather small size, and something like a terrier, are raised every year as an article of food; they are mostly fed on vegetables. The natives say that it is sweeter than the flesh of the pig, and much more palatable than that of goats or kid, which some refuse to touch, and few care to eat."—Ellis's Hawaii, p. 349.

¶ "During our stay at Fury Beach some polar bears were killed. Some of our party, tempted by the fine appearance of the meat, made a hearty meal of the first that was shot. All that partook of it complained of a violent headache, which continued with some two or three days, and was followed by the skin peeling off the face, hands, and arms, and, in some, of the whole body. On a former occasion I witnessed a somewhat similar occurrence; when on Sir Edw. Parry's polar journey, having lived for several days on two bears that were shot, the skin peeled off the feet, legs, and arms of many of the party."—App. to Ross's Voyage.

** "The Esquimaux eat the flesh, without experiencing any such in-

skin has an important connexion with our digestive organs; and this may account for the changes of the complexion which many undergo. Abstemiousness is probably a greater talisman for the preservation of beauty of countenance than is commonly imagined, and in both sexes.

It has been thought incredible that the fiercer part of the ancient pirates of the north should drink blood; but we find that this repulsive liquid, with animal entrails, is a banquet to the western Esquimaux, who also presented to Captain Beechey flesh in its raw state as an additional kindness.* Another set regaled themselves with blubber, and pieces of the walrus, which no European's stomach could possibly retain if he could swallow it;† others added wild berries, fish, and train oil.‡ All these things are sufficiently nauseous to those who are not in the savage state of life; but ants, grubs, worms, snails, and reptiles are as repulsive; yet these are liked and used. Snakes and serpents are eaten in Egypt and in western Africa. Lizards, mice, rats, and caterpillars also on the Niger.§ Ants are eaten by the Hottentots, either boiled, or raw, or roasted after the manner of coffee; even Europeans like their taste,‖ and one traveller thinks them no-

convenience; but the liver was always given to the dogs."—App. to Ross's Voyage.

* "The blood of animals is as much esteemed by these people as by the eastern Esquimaux. They placed several dishes before us. Two of their choicest were the entrails of one seal, and a bowl of coagulated blood. Seeing our reluctance, they tried us with another dish, consisting of the raw flesh of the narwhal, nicely cut into lumps, with an equal distribution of black and white fat."—Captain Beechey's Voyage, vol. i., p. 344, 361.

† "At another village, bowls of blubber, walrus, and sea unicorn's flesh were offered to us."—Ib., 365. Near Icy Cape, "One of the children was rolling in the bottom of the baidar, with a large piece of seal-blubber in its mouth, sucking it as a European child would a coral."—Ib., p. 385.

‡ At Chamisso island, "resolved that we should partake their hospitality, they placed before us strips of blubber in wooden bowls, and whortleberries, mashed up with fat and oil."—Ib., 391. "By another set, a dried fish was presented to each of us, and a bowl of cranberries mashed up with sorrel and rancid train oil."—Ib., 394.

§ See the first volume of this History, Letter XVI., near the end. At Kationga, near the Niger, Mr. Lander saw in the market "an immense quantity of mice, rats, and lizards, dressed and undressed, all having their skins on, and arranged in rows."—Vol. i., p. 180. "The natives roast, grill, bake, and boil lizards, rats, locusts, and caterpillars."—Ib., 192.

‖ "A learned foreigner told us, that when in his walks he meets an

tritious, and prefers them to the maggots which some civilized gourmands enjoy.* Several kinds of grubs are eaten in civilized communities, as well as by those we deem savage.† Mr. Kirby's friends assured him that they were much valued by some of our own fellow-subjects ;‡ and this valuable entomologist concurs with Dr. Darwin, to recommend the addition of both cockchafers and their larvæ to our own well-filled tables.§ It is not, therefore, the mark of a savage mind or taste to like these things. Indeed, we find the Greeks approved of them,‖ and the Romans fattened some for their enjoyment.¶ Hence we may allow the Burmese to eat their worms,** and others their snakes and spiders, without branding them as barbarous, or supposing that they must be famished to do so.†† The

anthill, he approaches it with the end of his walking stick ; the ants come out in great numbers ; some to reconnoitre, some for the mere exercise ; when the stick is pretty well covered with them, he draws it through his lips and secures them all. He describes the taste as cool and sourish ; not unlike that of the plant called sorrel."—North American Review, No. 76, p. 205.

* This is Smeathman, who says, "I have eaten them dressed in this way (roasted), and think them delicate, nourishing, and wholesome. They are something sweeter, though not so cloying as the maggot of the palm-tree beetle, which is served up at the tables of the West Indian epicures, particularly the French, as one of the greatest luxuries of the country.

† "Madame Marian has figured several of the larvæ which the natives of Surinam roast and eat as delicious food in her 'Insects of Surinam,' p. 24, 48 ; and St. Pierre notices one in the Mauritius, which both whites and blacks eat greedily."—Voy., p. 72.

‡ "A friend of mine, who has resided a good deal in the West Indies, informs me that the late Sir John La Forey was extremely fond of the palm grub when properly cooked. Mr. Hall informs me that in Jamaica the grub called macauco is in request at the principal tables."—Kirby's Entomol., vol. i., p. 300-1.

§ "I think with Dr. Darwin (Phys., 364) that the larvæ of the cockchafer, which feed upon the roots of grass, or the perfect insects themselves, might be added to our entremets ; bats, turkeys, and other birds devour them eagerly."—Kirby, p. 304. He also remarks, "It is probable that all the species of this genus might be safely eaten, as well as many other grubs of coleoptera."—Ib., 302.

‖ "Elian mentions that an Indian king set before his Grecian guests a roasted worm, taken from a plant which the Indians esteemed delicious. The Greeks concurred in the opinion."—Æl. History, p. 16, c. 13.

¶ "Pliny mentions that the Roman epicures fattened the cossus with flour."—Hist. Nat., p. 17, c. 24. Mr. Kirby thinks it not certain what species of grub this was.—P. 302.

** "The tauso palau, a long white semi-pellucid worm, which is found in decayed wood, is reckoned a delicacy in Burma."—Captain Low, Journ. As. Soc., No. 41.

†† *Mr. Kirby mentions the spider-eaters, p. 310.* "At Port Macquarie,

Greeks feasted so much on their grasshoppers as to distinguish critically their different flavours.* Locusts are highly valued and dressed in various ways by the Arabs,† and are not less precious to several other nations.‡ But if they be so pleasant as an English clergyman thought, some future age may welcome their visit, and grind, salt, boil, stew, or fry them as soon as they begin to devour or to attack the vegetable harvest. They will then add to our food instead of diminishing it.

The convertibility of animal matter to nutritious subsistence appears to be bounded only by the use of it. Whatever any people are not in the habit of feeding on is either unsalutary or unpalatable to them. But, whatever they accustom themselves to, they seem then to like and to thrive with. Thus, what we use only in besieged towns, when famine begins its ravages, stewed hides, is a regular food in some parts of Africa ;§ and the skin of fish, to us so indigestible by the strongest stomach, is the allotted food of children elsewhere.‖ So the hippopotamus, which Lander rejected, and which would have been insalubrious to him, was delightsome to his negro attendants, who had frequently feasted on it.¶

But, amid all these diversities, mankind seem to have agreed

New South Wales, the natives eat snakes, but not unless killed by themselves, lest it should have bitten itself, and thereby become poisonous."

* From Atheneus and Aristophanes we learn "that the Grecians thought grasshoppers most delicious in their pupa state; that the male ones were at first the best, and that the females, with their eggs, were very pleasant."—Kirby, 305.

† "Mr. Walpole mentions that the Arabs are as much astonished at our eating crabs, lobsters, and oysters, as we are at their eating locusts."—Dr. Clarke's Travels, vol. i., p. 187. The Arabs grind them and mix them with flour; at other times they boil them, or stew them.

‡ "The Hottentots fatten on them, and make soup of their eggs. The Mahrattas salt them. Mr. Jackson, in 1799, found them preferred by the Moors to pigeons. A person may eat, it seems, two or three hundred of them, boiled and fried, with salt and pepper, and a little vinegar. The Rev. Mr. Sheppard tried some, and found them excellent."—Kirby, Ent., p. 304.

§ Lander met with stewed buffalo hides in the African regions he visited.

‖ At Kotzebue Sound, "We noticed, that at their meals they stripped the dried fish of its skin, and gave it to the women and children, who ate it very contentedly, while the men regaled themselves upon the flesh."—Captain Beechey, vol. i., p. 454.

¶ "In the Isle of Gungo, on the Niger, with some boiled corn and fish, about ten pounds of the flesh of the hippopotamus were sent us. This being nearly all fat, we could not fancy it, and gave it to our people. They assured us it was the finest meat they had ever tasted. It forms a principal part of the food of the natives."—Lander, vol. iii., p. 20.

in one point, and that is, to prefer the animals of all sorts that live on vegetation to those which feed on each other. There is a rankness of taste attending the flesh that is nourished by flesh, which is universally offensive to every state of society. The carnivorous are, therefore, generally avoided, though, as far as nutriment is concerned, they may be quite as serviceable as the herbivorous and graminivorous classes.

It is obvious, from this catalogue of the diversities of human food, that they are all matters of choice, and not of necessity. They have been adopted, or, at least, continued, from individual taste, and not from want or starvation. The European approbation of them is an evidence that they are so much actual addition to the existing means of human subsistence; and, therefore, let us multiply to what number we may, as long as there are any classes of the animal kingdom on the earth, mankind cannot starve. What they can eat for pleasure they may also eat for its utility. Even raw flesh, where it is still used, is eaten in that state because the taste of it is liked; for, in some islands, raw flesh is served up with several cooked meats.* But nothing is more capricious than our use of the two senses of smell and taste, for we find seals preferred by some to turtle;† even such men as Göethe and Schiller‡ had peculiarities in their olfactory sensations, which

* In Hawaii, at the head governor's breakfast, "a number of his favourite chiefs sat in circles on the floor, around large dishes of raw fish, and baked hog or dog, from which each helped himself without ceremony."—Ellis's Tour, p. 42. At Macquarie, in New South Wales, "their food is always eaten in a raw state;" the reason they give for this is, that, if roasted, "it would become dry, like a waddy," or one of their clubs.

† Captain Beechey, when at Kamschatka, "presented the governor with three large turtles, which they had never seen before. His cook converted them into excellent soup, some of which was sent round to each of the respectable inhabitants; but several declared their preference for their own dishes, made of seals' flesh."—Beechey's Voyage, vol. ii., p. 243.

‡ Dr. Vogel, in his account of Göethe, gives this account of Schiller's liking the evaporation of rotten apples. "The following I had from Göethe himself: One day he went to pay a visit to Schiller; but, not finding him at home, he took a seat near his library table, waiting for his return. Here, at first, a peculiar smell became troublesome to him, and soon after that he fell into a state of insensibility, from which he did not recover until he was carried into the open air. The cause of all this they discovered to be a large quantity of rotten apples which Schiller, from a fondness for the air developed from them, had stowed in the drawers of his table." Of the same eminent man Lord Byron told Mr. Willis, "that he used to compose with his feet in a pail of cold water,

one may as much wonder at as to find such a civilized
as the Chinese devouring what we should term nauseo
bage, though its nutritive effects may equal those of th
delicate food.* The most deplorable and degraded pe
ity of any portion of the human race in their eating, ha
that of making banquets on their own species.†

The Divine instructions given to mankind as to thei
were those communicated to Noah, and through Moses
Jewish nations. By the first, all that moved with lif

with a pot of hot coffee at his elbow."—New Monthly Mag., 1
296.

Göethe's eccentricity was a love of the confined air and smell o
room. "It was with difficulty that he could be induced to have
dow opened for airing his study and sleeping room. An offensiv
he did not particularly mind. He also felt much vexed if any one
the candle in his presence; nobody could perform this operation t
him. He became exceedingly displeased if either book or paper
lie with its edges parallel to the corresponding edge of the table
Vogel's Account—his confidential physician.

* "The extremes of luxury and misery are nowhere more ludi
contrasted than in China." The rich buy, at a great price, the edib
nests, and highly value shark-fins, dried, and the bêche de la
black-looking seaslug from the Pacific Islands. By the poore
heads of fowls, their entrails, their feet, and every scrap of di
matter, earth-worms, sea reptiles, and other vermin, are greedily de
We have noticed lots of black frogs, in half dozens tied together,
for sale in shallow troughs of water. We have seen the hind-qu
a horse hung up in a butcher's shop. A lodger in a hotel compla
his bedroom being over the kitchen, he is grievously annoy
morning by the noises of dogs and cats which are slaughtering be
the day's consumption."—Missionary Voyages, 1832.

† Cannibalism is so abhorrent to all who are not in the savage st
the mind, from its desire to disbelieve it, struggles against the e
of its existence. But the authentic testimonies to its practice in
sia, New Holland, and in some of the East Indian Islands, and else
are too numerous and coinciding to be discredited. One of th
proofs of the practice still continuing even in New Zealand, int
Christianity and its civilization are beginning to obtain an entra
curs in Mr. Wood's letter from Kawia there, of 10th July, 1835.
gross darkness pervades the minds of thousands who are, from
time, actually destroying and devouring each other. I had an o
nity of beholding a most disgusting spectacle the other day.
from Waipa was returning from Taranake, about eighty miles
where they had been to fight, and where many poor creatures h
cut off, roasted, and eaten; and some of their flesh was brought
and distributed as presents among their friends. However r
this may appear to your feelings, and to the feelings of Christiani
civilized people, I assure you it is a fact. I saw the head of
chief named Ta Guntu, whose body had been eaten on their wa
This was exhibited as a trophy of their conquest."—Wesleya
Rep., 1836, p. 21.

therefore, all orders of the animal kingdom,* were given as meat to the human race, to be used as freely as vegetable food. This general appointment of every living thing to be nutritive substance, left it wholly to individual taste and choice as to what kind or classes of animated nature each population or person would select and use. None are therefore censurable for any particular habits in this respect except the cannibals. The whole was given to man for his sustenance, and therefore, we may say, provided for him. No restriction or prohibition was placed on any part as to the world at large, except that the blood was forbidden to be eaten with the flesh.† But as to the Jewish nation, a series of counselling precepts were given by the Deity, through Moses, to them, as to what animals they should abstain from and as to what they should use. Camels, rabbits, hares, and swine were forbidden; but all ruminating animals that were cloven-footed or divided in the hoof were allowed. All fish that had not fins and scales were to be avoided. Several birds, mostly of the carnivorous species, and all reptiles and insects, were likewise prohibited, except locusts, beetles, and grasshoppers.‡ These distinctions seem to have had some moral and civil objects in view, as well as reference to their health, and climate, and peculiar character and situation.

* "EVERY moving thing that liveth shall be meat for you; even as the green herb have I given you ALL THINGS."—Gen., c. ix., v. 3.

† "But flesh with the life thereof, which is the blood thereof, shall ye not eat."—Gen., c. ix., v. 4.

‡ Leviticus, c. xi., v. 3–27. Weasels, mice, tortoises, ferrets, chameleons, lizards, snails, and moles were also forbidden to the Jews.—Ib., v. 29, 30.

LETTER XXXII.

Almost all the Vegetable Kingdom is applicable and convertible into Human Food.—Instances of this in the Use of its various Genera for that Purpose in the different Parts of the World.—The Impossibility Mankind perishing from Famine.

My dear Son,

We have seen in our preceding letter that almost the whole of the animal knigdom, in all its orders and species, is applicable to human subsistence, and that each kind is found to be alike gratifying to the taste and nutritious to the life of those who are accustomed to it. The human body has been framed on the principle of deriving this pleasure and utility from animated nature; and this, in all its genera, has likewise been so formed as to be subservient to human benefit in this respect. The consequence of these arrangements is, that mankind can never be famished as long as any animals besides themselves are in existence on the earth; for man, being everywhere the master, no species can escape his search and power.

The vegetable compartment of nature is as universally applicable to human nutrition; almost all kinds of vegetation will nourish human life, and have been used for this purpose, and are found to be satisfying or pleasing to those who are in the habit of taking them. To be as brief as possible, I will only select some of the more particular kinds as sufficient evidences of the general applicability.

Acorns are still used in California.* Lupins were the common food of some of the sects of the Grecian philosophers, and especially of the Cynic school, which they carried about them in little bags.† Lupins and chestnuts are still used by the Sicilian peasantry when they cannot get corn.‡

* At San Francesco, "other Indians in the missions were grinding baked acorns to make into cakes, which constitute a large portion of their food."—Captain Beechey, vol. ii., p. 20.

† In Lucian's "Runaway Slaves," philosophy represents the Cynic philosopher as saying, "a halfpenny, to buy a few lupins with, is all I want, and the first brook I come to supplies me with drink." They carried these in their wallets.

In 1835, a traveller in Sicily described "the great body of the peas-

Lupin stalks are stated to be highly beneficial to the soil they are mixed with.* Acorns have now become the favourite substitute for coffee among the Prussians, and increasingly in Germany ;† and the blossoms of the linden-tree are found to make a palatable tea to the same distinguished nation, and to have beneficial medical effects.‡

The Greeks of the present day use thistles, and all sorts of weeds, as part of their food.§ Crocus roots are eaten at Aleppo ;‖ and the iris bulbs at the Cape of Good Hope.¶ The soft vascular matter of the birch-trees between the rind and the wood is also resorted to.** The general food of the Portuguese peasantry is stated to be chestnuts.†† In Terra del Fuego they live much on berries.‡‡ The Enare Lapland-

antry as supporting itself on beans, lupins, and chestnuts, while the corn was perishing in the granaries and magazines of the rich proprietors."—Metrop., 1835, p. 409.

* In Tuscany, among the green things buried in the soil for the melioration of the land, lupins ought to be employed in preference, as they greatly augment the fertility of the fields in which they are sown.

† "In Prussia, coffee is now very generally made from acorns. They are cut in very small pieces, roasted, ground, and prepared precisely as coffee. Eminent medical men recommend them both as a tonic and for nourishment. They are daily becoming of more general use in all Germany."—Sketches of Germany, vol. i., p. 99.

‡ "The flavour is very agreeable; it does not irritate the nerves. I have cured myself frequently of a slight cold by drinking plentifully of it. The German doctors recommend it as a beverage in almost every disease."—Ib.

§ Tietz, a recent traveller, mentions, in his "Reminiscences of Russia," that the vegetable diet of the Greeks includes thistles, and all sorts of weeds. Hence the proverb in those countries, "A Greek grows fat where an ass starves."

‖ "At Aleppo and its neighbourhood, crocuses are cultivated in great variety." Dr. Russell mentions "that the root of one species are eaten by the inhabitants, and called mountain cucumbers. Their flavour is considered as something like that of a nut."—Welsh, Voy. Chantlcl., vol. i., p. 274.

¶ "The farmers make a dish of the roots or bulbs of the iris edulis. When simply boiled, they taste very much like a chestnut or waxy potato."—Ib.

** "The Hudson's Bay Companies' people had stripped the birch-trees of their rind to procure the soft pulpy vessels in contact with the wood, which are sweet, but very insufficient to satisfy a craving appetite."—Franklin's Journ., p. 183.

†† "Their general food consisted of roasted chestnuts, washed down with cold spring water. When they could procure a little dried fish or sardines, with black sour bread, they would consider it a point of luxury."—Capt. Cooke's Mem. of the late War, p. 83.

‡‡ Webst. Voy., vol. i., p. 153.

ers make soups of the fir bark,* and likewise pound, gr
work it into bread.† In Barbary, the poorer Arabs liv
entirely on the wild fig while it is in season.‡ Gou
pumpkins boiled, stewed, or baked in pies, occur i
places; and dates are a favourite food of the Arabs in
and wherever these trees grow. That the mallow
daffodil were part of the aliment of the ancient Greel
burs as well as thistles have been used as food, and th
roots are a chief part of the subsistence of New Zea
and at various times have been ground and made int
in Europe, was mentioned in a former letter.◊ Also
nettle and dandelion are both still eaten, and the
the latter made into coffee.‖ The sago, palm, cocoa
bread-fruit trees, and the bananas and their great p
were also noticed¶. Some trees are used to make
sion from, like our tea. The leaves of the Paragu
are so applied in South America,** and in our back
ments of Newfoundland the spruce-tree is found to yi
freshing liquid of this sort.†† We read frequently
vegetables, not used or known before, brought into cu
for their nutritious qualities.‡‡ The yams we ha

* In winter they must put up with dried fish, and with so
bark and reindeer tallow. They peel off in summer the innerr
of the fir, divide it in long stripe, and hang it up to dry for wint
When used, these stripe are minced in small pieces along with
deer tallow, and boiled together for several hours with water
form a thick broth."—Von Buch, Trav., 1806, p. 324.

† The Laplanders of Trysail make their "barke brod" thus:
the young and vigorous fir-trees are felled, the tree is stripped o
for its whole length; the outer part is peeled off, and the interi
ing shaved off; nothing then remains but the innermost rind,
extremely soft and white. This is hung up in the air to dry, th
in an oven, afterward pounded and taken to the mill, where it i
into a coarse meal. The meal is mixed up with threshed oat-s
few moss seeds; and a bread about an inch thick is formed of
position."—Ib., p. 87.

‡ Campell's Letters on Algiers.

◊ Sacred Hist., vol. i., Lett. IV.

‖ Ib., Lett. VI. ¶ Ib.

** "They call it mattee; it is not so pleasant as the Chin
Webster's Voy., p. 87.

†† "I made acquaintance here, for the first time, with a dec
the tops of the spruce branches, to which I afterward became
customed, as a substitute for tea. From experience, I can pronou
be very salutary and bracing, though not so palatable as the
supplied by the East India Company."—Wire, Newfound. Jour

‡‡ "Thus, Mr. Redvall has most successfully cultivated th

known; but, perhaps, have not been generally aware that a human being could be supported by only half a one for his daily food.*

All these facts concur to show that it is as true of the vegetable as of the animal world, that all its classes are usable for human food, and are sufficient for human nutrition. For it is not what we deem solid food, nor the quantity of it, that is essential to health or strength. The laborious Hindoo Coolies who carry the heavy baggage are an instance of this, for they take but one moderate meal a day of rice and water.† Nor is scanty fair less pleasurable than the most costly and abundant, when the mind is not fretful about it, and when appetite invites.‡

But one of the most remarkable facts to show the universal applicability of all vegetable matter to human nutrition, is that, in the Quilimane country, in southeast Africa, GRASS is made an article of human food, and is cultivated for that purpose, and cooked into a palatable porridge.§ A still more extraordinary circumstance of the same bearing is, that the leaves of trees and herbs are both applicable and sufficient for the sustenance of a human being who has been accustomed to the use of them, and are capable of giving both strength and pleasurable vitality.

cremata, a simple tubercle of which affords a large quantity of wholesome food; the taste resembles both the common and sweet potato."—Athenæum, 1836, p. 18.

* Mr. Lander was taken by the Eboes: "While in their hands, we have been kept on the regular slave allowance of half a yam a day."—Vol. iii., p. 205.

† "These human animals of burden began to sling the heavy baggage to their poles to carry it up through the mountain passes. The fatigue they endure is very great; yet they seldom take more than one meal a day, and of this very sparingly. It consists chiefly of boiled rice and a little curry. Their drink is water."—Officer's Narrative, in Frazer's Mag., 1835, p. 666.

‡ Mr. Lander thus expresses his own feelings under such circumstances while in the hands of the Eboes: "We had suffered from hunger the whole day, without being able to obtain anything. Soon after we stopped for the night, our guards gave us each a piece of roasted yam. This roasted yam, washed down with a little water, was to us as joyful a meal as if we had been treated with the most sumptuous fare, and we laid ourselves down in the canoe to sleep in content."—Vol. iii., p. 164.

§ "The country around Marvoro is cultivated for some miles principally with GRASS, which, before it is quite ripe, is plucked, dried, and husked in a large wooden mortar, then ground between two rough stones. This meal is made into a porridge, and, in general, eaten with fish."—*Owen's Voy., vol. ii., p. 51.*

"In the department of the Var, a man is now living who, having been at one period of his life reduced to great want, was obliged to eat RAW LEAVES of trees, herbs, &c., to satisfy his hunger. From being accustomed to it, he *now prefers* this diet, and adds only three or four ounces of bread and a little wine to his daily fare, with which he could easily dispense.

"He is remarkably *strong* and healthy, of a kind and gentle disposition, and is sufficiently intelligent. His sleep is quiet, but very light, for the most trifling noise, even at a distance, wakes him. His skin is remarkably insensible, and the cuts and scratches which cause great pain to others are scarcely felt by him. Besides this, he is not in the least affected by extreme cold."*

That foliage, after his being used to it, was preferred by this individual when other diet was in his power, is evidence that it can be pleasurable to the organs of taste; and that he was strong with it is also an indication that herbage would invigorate human bodies, as it gives power and energy to our cattle.

Yet still more extraordinary than this, and showing what vast latent powers of nutrition for man are residing in the vegetable kingdom for his use, in case all other food should ever become inadequate to sustain his multiplying populations, a crisis under the other provisions of nature hardly possible to occur, is the ascertained fact that wood may be converted into nourishing and palatable bread. We owe this discovery to the German Professor Autenrieth. Dr. Prout has thus described the preparation of it in the "Philosophical Transactions:"—

"First, everything that was soluble in water was removed by frequent maceration and boiling. The wood was then reduced to a minute state of division; that is, not merely into fine fibres, but into actual powder; and, after being repeatedly subjected to the heat of an oven, was ground in the usual manner of corn. Wood, thus prepared, according to the author, acquires the smell and taste of corn flour.

"It is, however, never quite white, but always of a yellowish colour. It also agrees with corn flour in this respect, that it does not ferment without the addition of leaven; and for this, some leaven of corn flour is found to answer best. With this, it makes a perfectly uniform and spongy bread; and when it is thoroughly baked and has much crust, it has a *much better taste* of bread than what, in times of scarcity, is prepared from the bran and husks of corn.

"Wood flour, also, boiled in water, forms a thick, tough, trembling jelly, like that of wheat starch, and is very nutritious."†

As this is a very important discovery in its bearing upon the future population of this world, and is alone sufficient to

* Athenæum, 1835, p. 627.
† Philos. Trans., 1687, part 2, p. 318.

ve all solicitude about the sustenance of its possible mul-ations, I will add the Professor Autenrieth's own ac-t how to make this wood flour in perfection :—

he wood, after being thoroughly stripped of its bark, is to be sawed versely into disks of about one inch in diameter. The sawdust is preserved, and the disks are to be beaten to fibres in a pounding- The fibres and sawdust, mixed together, are next to de deprived erything bitter, which is soluble in water, by boiling them where el is abundant, or by subjecting them for a longer time to the action d water. This is easily done by enclosing them in a strong sack, they only half fill, and beating the sack with a stick, or treading h the feet in a rivulet: the whole is then to be completely dried, in the sun or by the fire, and repeatedly ground in a flourmill.

he ground wood is next baked into small flat cakes with water, red slightly mucilaginous by the addition of some decoction of d, mallow stalks and leaves, lime-tree bark, or any other such sub-s."

professor prefers mallord roots, of which one ounce will render en quarts of water sufficiently mucilaginous, and these serve to four pounds and a half of wood flour into cakes.

hese cakes are baked, and they are brown on the surface; after ey are broken to pieces and again ground until the flour passes gh a fine bolting cloth: upon the fineness of the flour its fitness to bread depends. The flour of a hard wood, such as beech, requires ocess of baking and grinding to be repeated.

Vood flour does not ferment so readily as wheaten flour; but the sor found that fifteen pounds of birchwood flour, with three pounds ir wheat leaven, and two pounds of wheat flour mixed up with measures of new milk, yielded thirty-six pounds of VERY GOOD d."*

at straw, hay, and the stalks of trefoil, lucerne, and sain-had been converted in France into flour, and that wheat r had been made into bread which was agreeable and nu-us, and superior to the common bread used by the lower s on the Continent, was mentioned to you in the first of our correspondence.†

l these facts concur to show that it has been the plan of Creator to make nearly the whole animal and vegetable loms applicable and subservient to our subsistence; and with few exceptions, all the plants of the field and the of the forest have been purposely so formed as to yield eir substance to mankind nutritious and pleasing food. t is even bitter and unpalatable may, by skill and treat-, be washed from them; and thus the amplest care has taken that the lords and most intelligent beings on the

* Quarterly Review, vol. 52, p. 410.
† Sacr. Hist., vol. i., Lett. IV., p. 81.

earth shall never perish for want of gratifying aliment, whatever be their numbers. Most of the animal and vegetable genera have been and are in use by some people, for this purpose, and both nourish and please them.

As far, then, as the question of our sustenance rests between man and his Creator, there is a most diversified and abundant provision made for him, which will never fail for his support through all his generations, let them spread as they may, as long as herbs and trees can grow, or animals exist in addition to all the corn and cattle that can be reared.

It is, therefore, contrary to reason and fact to imagine that our population will in any age of the world be starved. The maintaining bounties of Providence will always be exuberantly on the earth, ever ready to be converted or applied to all that require them. Our Creator raises them in or upon the surface for the benefit of all. But, having done that, he leaves it to mankind to avail themselves of his provision, and to circulate and distribute it to each other, so that every one may have what he needs. This is an affair entirely between man and man. There is always plenty on the earth for all, however much any may be destitute of it. It is the purpose of the Almighty that human care, industry, skill, and judgment, and human virtue and benevolence, should be the agencies and instruments to cause every one to partake of what he is always amply giving. That any want when there is enough in society from its great Author for all, evinces that our legislative provisions, and our civil and social arrangements and course of things are yet defective or insufficient for the general welfare. That any one should, like Mr. Hazlitt, be two days without food, in a metropolis abounding in plenty (and in all nations there are thousands at times, if not always, in that state), is a circumstance which announces, not that we are overpeopled or that nature is inadequate, but that human wisdom and benevolence have still to devise the means of ensuring to all the subsistence and necessaries which they want. It is man, not the Deity, who has to think and act rightly on this subject, and thereby to remedy this great social evil.*

* "William Hazlitt, a few months before his death, met Hone in the street, who inquired after his health and circumstances. Both were bad. *He* answered, 'You are aware of some of my difficulties, but no human *being* knows all. Can you lend me a shilling? I have been without food these two days!'"—Monthly Mag., March, 1833, p. 228.

LETTER XXXIII.

Animal and Vegetable Matter, in any Form, capable of nourishing Human Life.—Four Sources of it.—Three that will last as long as Man.—Probability that the Improvements yet attainable in Cultivation will always suffice.—The Benefit of small Allotments and Spade Husbandry under wise Regulations.

My dear Son,

A few more observations and circumstances will complete our review of the plans and purposes of the Deity in his established system and provisions for our subsistence. We see that he has designed that our bodies should be nourished, their moving particles be supplied, their structure continued, their living principle be refreshed, and its union with them be maintained, as long as the association is to continue, by animal and vegetable matter, and by the ethereal agencies which accompany it. This matter always consists of some of those elementary particles of which the earth itself is compounded, and chiefly of the four great principles which seem to be the basis of most—oxygen, hydrogen, azote, and carbon. But, in order to become serviceable in the offices of nutrition to us, these material elements must undergo the action of the living functions of organic life, and by them, in their organizations, be elaborated or prepared into that state and into those combinations which give to them their alimentary efficacy upon us. One form of animal or vegetable organization would have been sufficient to make that elaboration of the material elements which would be nutritive to us; but, instead of confining his supply to any single mode, we find that our Creator has chosen to place and arrange it in thousands of diversified forms, which his Divine imagination has invented. It is of no importance to its sustaining effect from what figures or compositions of it the nutritive matter is passed into our stomach. Our mastication destroys all forms. Our teeth have been devised to break and comminute them into small fragments, and the digestive process dissolves every kind into smaller and finer molecules. But he has chosen to please our eye, and produce to us both intellectual pleasure

and improvement, by shaping the materials of our food into those innumerable forms and appearances of beauty and interestingness which the several species of the two organic kingdoms of nature are everywhere presenting to us. This was not at all necessary to our nutrition. That depends on the material particles of which the plant or animal consists, and not on its figure or colour. Azote is the peculiar and predominating principle of all animalized matter, as carbon is of all vegetable compositions. By either, or by both, in the elaborated state in which we receive them, in their organized arrangement, we are nourished, and our present life is continued; but, as all vegetables contain the one, and all animals the other, and all shapes of either are destroyed in our mouth and dissolved in our stomach, it is quite the same as to their nutritious operation from what figures of either we receive it. The bird, the quadruped, the fish, the insect, the serpent, eel, and other animal forms, alike present to us the animal matter that will benefit us, as every species of eatable plant brings also the vegetable element we can live upon. All forms of them being equally nutritious, it is really indifferent to our subsisting life from what organized figure they come. To which we shall addict ourselves in preference to others, has always been, and always will be, as far as we can yet foresee, a subject of national habit and individual taste. These are everywhere varying. None servilely copy others. Each country has subsided into customs in this respect satisfactory to its inhabitants; and each seems to prefer, in inclination, such as it has adopted, and to adhere to its own articles and mode of diet from actual liking and deliberate choice.

The true view of philosophy, therefore, seems to be, to regard all the animal and all the vegetable kingdom as two great magazines of nutritious matter, provided by our Creator for our subsistence, and set before us, in all parts of the world, for our use and gratification. We prefer the corn plants, and culinary vegetables, and our domesticated herds, and flocks, and poultry, and selected game, for our daily food, and leave the rest of the existing fund of animal and vegetable matter, generally, untouched and disregarded; and we are right to do so as long as these will suffice us; but when we are speculating on the question whether human nature can be continued *on* earth, unless its population be checked or diminished, it is

right that we should remember all the sources of subsistence which will be always at the command of our multiplying posterity.

The facts of the last few preceding letters prove to you that there are, and will always be, four distinct processes and sources of nutritive matter to us, of which every generation may avail themselves: the cultivable ground of our surface, the increasing produce we may raise from this, the other vegetable matter which is convertible into palatable and nutritious food, with the great body of animals in nature, not now used by us, to which others may resort; and the possibility that future science may discover the means of imitating the operations of organic life on the material elements, and of elaborating them into a nutritious form by human chymistry, as nature is now daily doing by her vegetable and animal economies.

Of these four sources of supply the first three are certain—are before us—are always in our power; the last is only, at present, a conjectural possibility; but it is at least as probable to occur as it is that there ever can be on earth that multiplication of our numbers which will make it necessary as a last resort. I think we need not doubt that our surface and its cultivated produce can be hereafter made to supply all the food that any numbers which may arise will require.* But if any choose to extend their imaginations or their apprehensions beyond the vast amount of human beings which these two sources can be made to supply, then, as long as any forests remain, or new ones, or any other vegetable besides the corn plants can grow, or any species of animals are in being, the marvellous numbers of human kind that are supposed capable of coming will here find supporting and sufficient nutriment. Our forests, and the new plantations that will ever be succeeding what may be cut down for use, will be at least as inexhaustible as our coals. Wood convertible into bread, and coals usable as fuel, may be expected to last as long as human nature will be on this earth, though it is one of the most improb-

* Many facts show how land hitherto uncultivated, or of a very inferior kind, may be made to yield great quantities of useful food. "In 1835," I read, "part of the sandy soil of Bagshot-heath, one of the most barren parts of the kingdom, has, *last year*, yielded at the rate of ten bushels of potatoes an acre, and has now a luxuriant crop of cattle-cabbage, of not less than forty tons to an acre, growing on it."—New Monthly Mag., 1835, p. 415.

able of all possibilities that mankind should ever be called upon to make loaves of their trees, or puddings or porridge of their grass and straw. But it will be rational to contrast the one improbability with the other. That there is plenty of land untilled on our surface to cultivate, a former letter stated. This may be made highly productive.* No fact can be more certain than this. It is not less obvious to the enlightened observer, that, even where land is in husbandry, it is not so cultivated as to yield the quantity of produce which, if duly managed, it would now supply. This is declared to be the case even in England,† and still more manifestly in Wales, notwithstanding all the demands which have been made upon it.‡ The same complaints have been made as to parts of Scotland.§ If our improved island be still in such a defective state that its present produce could be easily doubled, we need not wonder that every other country is now growing so much less than it could do, even from the ground which is in culture.‖

* The Rev. H. Berry, in 1833, thus stated the improvements of Mr. Coke, who has been one of the greatest of the agricultural benefactors of his age: "Mr. Coke's estate, round Holkham, consists principally of sandy loam, or light gravel of the same character, with occasional, but not frequent, patches of bog. The bog was covered with low alder-bushes and sedges, which seldom failed to hold a fox. They are now, by his skilful application of capital, highly productive water-meadow. When he first came to Holkham, an estate that was tithe-free let for eighteen pence an acre; subsequently at three shillings, and was left by the tenant because he would not pay five shillings an acre. Now let all despondency cease as to the capability of our poor soils to produce food, and be property, under a system of judicious management. From this estate Mr. Coke has, by his superior management, obtained 79 bushels of barley per acre; and on the same land, and also on land of a similar quality, his crop of WHEAT produced rather more than 34 bushels an acre. This was obtained from land decidedly not wheat-land, but it shows what cultivation will achieve."—New Farmers' Journal, 13th November, 1833.

† We have been assured by the highest practical authority, that were England in general as well cultivated as Northumberland and Lincoln, it would produce more than double the quantity that is now obtained from it with a less proportionate outlay."—Edin. Review, No. 120, p. 391.

‡ Messrs. Kennedy and Grainger, in their "Observations on the Present State of Tenancy in England," remark: "Nor does Wales, in general, produce half what it is capable of doing under proper management. But whatever requires a little trouble above the natural productions of the land is thought quite unnecessary, and is totally neglected."

§ "In some of the northwest districts of Scotland, where it is not customary to grant leases, agriculture is worse than in Wales."—Edin. Review, No. 120, p. 397.

‖ In 1833, Mr. Colgate, of Chevening, described how he had once ob-

The same small proportion of producible food that is actually now raised, appears in the most opposite quarters of the globe, and alike in the New World as in the old one. It was noticed in Wallachia ;* it is complained of in South America.† It is so, in some degree or other, everywhere else.

But if the whole of our lands now in husbandry would produce double their present harvests if all were properly cultivated, then we can support twice our present population by merely making good farming general ; so that, as it would take fifty years to double in at our present ratio, we are safe for this period from outrunning our subsistence. When that term is reached, the cultivation of the ground now lying waste would meet the wants of the subsequent numbers ; and the introduction of the spade husbandry on the inferior lands would make them as productive as better soil. This is the case in Flanders, as we noticed before. It is so in the Tyrol. The spade is there used,‡ and such is its efficacy, that the English occupier of twelve acres cannot live so well as the Tyrolean peasants with his four acres.§ The picture drawn of one of these little farmers there, who lived on the produce of only four acres, is very curious and interesting. In his house Mr. Inglis found—

"Six persons at dinner at eleven o'clock—the peasant and his wife, hale people, about fifty ; a son from Trent, another at manhood, and twin daughters about sixteen. They had soup of Indian corn ; about five

tained four quarters of wheat from half an acre of ground, by drilling and hoeing. Of two sorts of corn, he says of one, "I have this year grown five quarters and a half an acre, while the remainder of the field, sown with red wheat, produced only seven sacks an acre."—New Farmers' Journ., 20th November, 1833. All such things show what may yet be done.

* Dr. Walsh found it thus in Wallachia : "Wheat is the principal agricultural produce, but the quantity raised bears no proportion to the extent and fertility of the soil," p. 293.

† General Miller, as he travelled in Peru, says, "The land here produces cocoa-leaf, rice, Indian corn, pineapples, &c., in great abundance and of excellent quality, when cultivated, though very small quantities of these things are grown, owing to the laziness of the people who superintend or work on the hacienda, and whose almost only food consists of the blanched potato, sun-dried meat, and capsicum. Vegetables are scarcely ever seen, although the soil and climate admit of the production of most sorts for the table."—Journey from Cuzco.

‡ "The Tyrolean small proprietors work entirely by spade husbandry, and have no occasion for the outlay of an English farm."—Inglis, "The Tyrol."

§ Ibid.

pounds of bacon, boiled; a salad; bread, made two thirds of Indian corn and one third of wheat, and a little butter.

"The whole of this land was four acres; of this one third was devoted to Indian corn; half an acre was in wheat, another half of one in barley; a quarter of one was in flax; one acre and a little more was in grass and wood; and a quarter of an acre in a garden, containing cabbage, potatoes, salad, and a few cherry-trees."*

"The Indian corn was used in the establishment; one half for the family and one half for the winter food of the cow and other animals. There was a considerable surplus of the wheat; and this, with the barley, was taken to the Brixen market, where they produced more than was sufficient to purchase coffee, sugar, wine, implements, and the clothing needed. A small money stock was also saved beyond all that was required, which amounted now to a considerable purse. The flax was spun, and woven, and fashioned in the family. The grass was all needed for summer pasture for the cow. The wood supplied firing. The vegetables were looked upon rather as a dainty.

"No cheese was made, because the soup consumed all the milk, except a little that was saved for butter. Besides the cow were two pigs, a litter of young ones, and a number of hens. The dinner I had seen was the regular dinner of the house; except that, about two days in the fortnight, some fresh meat is bought at Brixen market from the money obtained by the sale of eggs and fowls. The master and his son, with a little assistance from his daughters, managed and tilled the ground, which seemed a good, lightish soil, and was remarkably clean."†

If such a family could be thus maintained from four acres, who can entertain any dread of a population being ever greater on earth than its producible food can nourish, when he computes the number of acres available on the earth?‡

That the spade should supersede the plough would be a retrocession of civilization, which would be followed by consequences highly injurious to society. For the most complete cultivation and the most generally abundant harvests, the ploughshare must work, whether horses drag it or ma-

* Inglis, "The Tyrol," vol. ii., p. 5.

† Ibid., p. 7. Mr. Inglis ascribes much of the superior comfort of the Tyrolean peasants to the greater produce and nourishment of the Indian corn. "The fine athletic peasantry of the Tyrol attest the wholesome and nutritious qualities of the Indian corn."—Ib., vol. i., p. 180. "He told me that he had never known his crop of Indian corn to fail, though it had varied; but his wheat had several times been unproductive; sometimes from insects, sometimes from other causes."—Vol. ii., p. 9.

‡ How much the subsisting produce of a country may be increased by more and better cultivation, appears in the remarkable augmentation of the exported corn from Ireland within one century. "The quantity of grain exported from Ireland in 1728 was 29,638 quarters." In 1825, the exported corn had increased to 12,774,442 quarters, that is, 400 times in amount. So that the superfluity of Irish produce is now above 400 times what it was one hundred years ago.

chinery impels it. Human labour alone must always act upon a small scale of effect, compared with the assisting power of animals and mechanic coadjutors; but the spade may frequently be an important ally in the hands of small cultivators, and operate beneficially on the inferior soils, which manual labour, so employed, may make more productive than art and capital could be so efficiently and so profitably applied to.* When more produce is wanted, the spade may be thus employed collaterally with the plough—a subordinate instrument, indeed, but with a co-operating and coinciding result. At present, when the cultivation now in practice, with all its inequalities and imperfections, is everywhere raising more than the consumption demands, there is no occasion to resort to the manual operation for the purpose of procuring corn.† When the numbers increase so much as to need more sustenance than the ploughed lands will yield consistently with their other produce, the spade may be put into activity to enhance the supply. But, until this necessity shall arise, there is no occasion to increase sufficiency into superfluity. In the mean time, the allotted system and its personal labour, during the unoccupied time of the agricultural assistants, may be very usefully applied to the increase of their domestic comforts and to the improvement of their individual character.‡

* At the Ipswich Labourers' Friend Society, Mr. Pilkington mentioned that "some had thought that labourers would, by forced crops, empoverish the land; but no instance had yet occurred to warrant this opinion. On the contrary, the allotments were found to increase in productiveness. They displayed a spirit of emulation in their cultivation; and land which had been considered barren, and would starve a rabbit, had been made to yield remunerating crops."—County Chron., 7th Dec., 1833.

† Few things can more satisfactorily prove that Europe is producing more corn than its populations consume, than the spreading cultivation of beet-root for sugar. In 1835 there were nearly 300 manufactories of this in only two of the departments of France, Le Nord and Pas de Calais, producing annually 3,000,000lbs. of sugar. Germany and Russia are also trying it. There are now thirty manufactories of it in active operation in Russia. France is also experimenting to make sugar from chestnuts, and finds that "some processes of extraction have already yielded fourteen per cent., which is more than equal to the average produce of the beet-root."—Public Papers, 12th January, 1837. In most of the provinces of France, every third year the land is stated to be left untilled, as a useful fallow state; and yet France can feed its own population, and have a surplus of produce, and land for beet-roots and other things.

‡ "It *improves the comforts* of the labouring classes, restores the *moral tone, of which destitution* and dependance had deprived them, and

Without injury to the farmer or to the community, they can raise their little stocks of nutritious vegetables for themselves and for their class of society, which would give them more food, and conveniences, and independent maintenance than they can now enjoy.* It should be always an object of philanthropy to make our poorer brethren as much easier in their circumstances, and happier in their feelings and prospects, as wise measures and kind thoughts for their welfare can occasion. The allotment system, under judicious management, has, in numerous instances, produced this result, and promises to be more extensively beneficial, and will be better understood and directed in proportion as it is tried and practised.† I rejoice, therefore, to see our nobility and gentry, whose respective character and conduct, as classes of the British population, are distinguished by their liberality and benevolence, encouraging the experimental exercise of this humbler husbandry.‡ Under prudent regulation, and with the

will clear the country of much of its poverty, and a great proportion of its crime. William Allen's cottage colonies, at Linfield, in Sussex, form, in the woodland scenery, a cheering picture, creating comfort, happiness, and security where there was waste, and misery, and moral desolation."—County Chron., 1st February, 1834.

* Mr. William Allen thus describes his benevolent system and object: —"The plan is, to cultivate these allotments by the spade entirely, in a certain rotation of crops, which afford the greatest quantity of food for man and beast. We have found, that if the farmer's labourer is permitted to have one acre of land, at a rent from 30*s.* to 40*s.* for the acre, he may, by saving manure, and cultivating the land half in potatoes and half in corn, realize 3*s.* a week in addition to the wages from his employer, and derive many comforts to his family besides. In some instances the wife and children have done most of the work. The labourer has, in every instance, a quarter of an acre for a garden in addition to the acre."

† The Marquis of Chandos, one of the warmest and most intelligent patrons of British husbandry, expressed his approbation of the system at the Bucks Association in 1834. "We must induce the labourer to earn his living without parochial assistance. In my own family, we have found the allotment system so advantageous, that, in several parishes, the rates have been greatly reduced, and, in one, entirely taken off."—County Chron., 1st February, 1834.

‡ "The Bishop of Bath and Wells, one of the earliest and enlightened friends of this plan, has taken 16 acres of land in the parish of Charlcomb, near Bath, to let out to honest, industrious families, in a quarter of an acre to each; the rent, after the first year, to be 1*l.*, with the conditions not to receive parish pay, not to work in it on Sundays, not to be a drunken or dissipated character, and not to keep a beer-shop."—Keene's Bath Journ., February, 1834. "At Saffron Walden, Lord Braybrooke has patronised allotments upon an extensive scale, and, for five sessions there had been no prisoners."—County Chron., 7th December, 183[illegible]

guardian superintendence of enlightened proprietors, it will animate and meliorate the disposition and conduct of our agricultural peasantry, and train them to be spontaneously moral and intellectual beings to such a degree as will strengthen the foundations of our social fabric, and make them respectable and respected members of its most numerous compartments.* This system, however, like all human schemes and institutions, requires a prudent superintendence, and those regulations which, in producing all the effectible good, will prevent or modify any evil consequences.†

With all these realized effects, these prospects, plans, resources, efficiencies, probabilities, and possibilities, and with that spirit of intelligence, philanthropy, and moral purpose which is now actuating our countrymen generally, and spreading largely in every nation around, we may look forward to the continuance and multiplication of the human race on our globe with joyous hope and well-grounded belief that every

"The Marquis of Salisbury is a strong advocate for small allotments, with spade husbandry, to the poorer classes. In the parish of Hatfield alone, by the adoption of this system, he has effected a saving of several thousands a year in the parochial expenditure."—Standard, 16th February, 1837.

* The Duke of Bedford, the Marquis of Lansdowne, Lord Kenyon, Lord Morpeth, the Bishop of Lichfield, and several other noblemen and gentlemen, are giving the system a fair trial and generous encouragement. Mr. P. Thompson's plan, near his seat at Errick Park, is thus noticed:—"Every labourer or humble mechanic, in the parishes in which his estates lie, is provided with one rood of land, independent of garden or orchard, at the same rent precisely as is paid by the farmer. The happiest results are experienced. The truly industrious, with their families, are seen constantly busy upon their allotments. Those of habits less fixed are found to cultivate theirs with profit, satisfaction, and content. The rents are paid half yearly. Each tenant has a printed copy given to him of the rules by which he holds the land. It is to be cultivated by manual labour alone, with the strictest regard to honesty, morality, and good neighbourhood."—County Chron., January, 1834.

† The rule adopted at Warminster was—"The quantity to a labourer should be what will supply his wants, but not be enough for sale; a quarter of an acre would do this." A friend to the plan very sensibly says, "I should like to see the spade in use in every parish by the cottager on his allotments, but he has no business with the plough, and ought to have no more land than he can fairly manage with his own hands and those of his family." One person, when his application was refused, because he was not of good character, said, "Give me an opportunity of honestly employing my time, and my land shall be as well cultivated as the rest." He has kept his word; he has hollow-drained his land, *and his rent is punctually paid.*"—New Monthly Mag., 1833, *p. 393.*

generation will increase in happiness as well as in number and in rightness of conduct, as progressively as they must advance in knowledge, and may advance in piety, talent, and mutual kindness and urbanity.*

I will close this letter by a striking instance how much the manual industry of a worthy poor man may improve useless land, and by another which shows that the poorest may, by care and diligence, attain even a respectable portion of moderate property; both indicating how much the mind and character of the man, as well as the produce of the country, may be advanced.

"Edward Richards, aged sixty-eight, the father of six children, and son of a poor man, had resided fifty-two years in Cirencester parish, and, during the early part of his life, was a common labourer.

"About 35 years ago he agreed with a farmer to clear out an acre of rough quarry land, on condition of having it three years rent free. On this unpromising spot he and his wife applied their surplus labour to such advantage, that, during the three years, he cleared 40*l*. He then purchased two acres of thin, poor land for 80*l*. These two acres have long been in a highly productive state. Soon after he entered on this cultivation, *he raised*, in one year, SEVEN QUARTERS OF WHEAT from it, and has refused 100 guineas for it.

"He obtained from Earl Bathurst seventy-five perches of waste unproductive land, at a quit-rent of 10*s*. He has possessed this spot thirty years, and has brought it to a state of great productiveness. For the last ten years he has rented five or six acres of land, besides these two plots; and during that time has kept two cows, and sheep, and pigs."—The Labourers' Friend's Magazine.

"Mr. Gray, of Pacham, died at seventy-four. He and his wife afford a rare instance of frugality and industry. They were both born at Pacham, in 1761, of poor but honest parents, who had large families. They went to service in farmhouses at an early age, and were married about twenty-one. Their parents, dying, left them nothing but the wide world before them.

"He worked as a day-labourer until he had several children. He then hired between three and four acres of glebe land, and had the field of the churchyard, which enabled him to keep a cow, and bring up a family of ten children in a very respectable manner, without any expense to the parish.

"He has followed his daily labour till within the last two years, holding his occupation to the time of his death. It is supposed that he has saved between 1000 and 2000*l*. His widow and children survive him, and are living in a very respectable manner. He lived and died an honest man."—County Chronicle, 7th January, 1834.

* I cannot avoid adding an extract, marking an instance of judicious encouragement to the industry and integrity of our poorer brethren. "On 1st of November, the Bishop of Bath and Wells gave a dinner of roast beef and plum pudding to 205 tenants of the allotments let out by him."—New Farmers' Journal, 8th November, 1833.

It is a pleasure also to find that the comforts of the labourers are in-

LETTER XXXIV.

Miscellaneous Facts and Remarks as to the Diet of different Countries.—Their general Enjoyment alike of all that they are used to.—The Benefit arising from a moderate or abstemious Use of Food.—Vegetable Diet the most common.—Digestibility of the different Substances eaten.

My dear Son,

Having thus found that the order and course of nature have been framed and carried on upon the plan that there shall always be sufficient sustenance for the human populations that may arise, I will only add a few miscellaneous facts and observations on the habits of different people as to their customary diet; on the similarity of pleasure which each seem to derive from what they use; and on the benefits to health and strength, to spirits, mind, and temper which most generally arise from a moderate use of it. These will lead us to infer that the plan and purpose of Providence, in all the varied bounty which nature has been made to present to us, are, that we should use these favours with the same selecting judgment, self-government, and wise regulations by which all our bodily gratifications should be modified, and according to which they should be indulged in or forborne. In nothing is the practice of self-command more necessary, or will it be more useful; and, as it is exercised, it will be found that, whatever is most useful to us, will always be found pleasurable likewise, in proportion as it is adhered to.* Luxurious diet, or refined or complicated cookery, is not necessary to

creasing. Mr. Loudon, who, in 1833, had visited nine counties, which he had passed over twenty years before, says, on comparing the two periods, "We have found a decided improvement in the cottage gardens everywhere, by the more frequent appearance of flowers in them, and by the China rose trained against their walls. The cottage dwellings, on the whole, are not worse, and, on some estates, they are a good deal improved. Many cottages, which before had no gardens, have now considerable portions of ground added to them."—Gard. Mag., November, 1833.

* Even a Roman, in the most luxurious and gross-feeding age of his nation, could say that simple diet was the most beneficial to mankind. "Homini cibus utilissimus simplex."—Pliny, Nat. Hist., l. 2, c. 117.

comfort.* The simplest and most natural are as gratifying as the artificial to those who use them.†

The Prussian nation is one of the most cultivated of the present day; and yet, with all their prosperity and improvements, they make bread and butter their favourite food; and, next to this, potatoes, cooked in various modes, which they find sufficiently gratifying.‡ The Greek sailor lives upon olives and bread.§ The habitual fare in a chief laird's house in the Hebrides but forty years ago was no better; it was not less pleasant or satisfying because it was the simplest aliment in use.‖ In the early part of the last century meat was a

* A lad in a village, lately taken up for stealing, was sentenced to three months' hard labour in a prison. The policeman told him that he would there have to live on bread and water. "Shall I have bread?" was the boy's answer; "that will make me quite happy. I don't wish for anything better."

† The feelings of a British officer in the Egyptian fleet of Mehemed Pacha, in 1833, on this subject, written with a recollection of the privations he had there to undergo, and of the things offensive to him he had to eat, will illustrate the natural state of the case on this point. "In England, we hear every day of the distresses of the poor Irish living on cold potatoes! I can tell you that cold potatoes are no such contemptible food; for I remember the time when one of those would have been considered by me as a luxury. A raw turnip would have been preferred to boiled horsebeans and oil. Talk of bread and water as a punishment! why, if we could have got hold of a supply of this, we should have eaten till we had almost choked ourselves. So no more about the miseries in England. There are no such things in existence."—Unit. Serv. Journ., 1834, p. 368.

‡ "The Prussians are in general extremely abstemious; bread, butter, and potatoes being their principal articles of consumption. The potatoes are so with the lower classes; but I have seen all ranks partake of the bread and butter half a dozen times daily. If you visit a friend, it is more than probable that the lunch will be butter hamme, bread and butter. If you go to an inn, and order refreshment without specifying anything in particular, this will certainly be brought. But, however popular it is, it divides its empire with potatoes, which may be deemed the national food, since I have frequently seen them served in six different forms. The bread was made from them, the soup thickened with them, fried potatoes, potato salad, potato dumplings, and potato cheese. This last is one of its best preparations, and will keep many years."—Sketches of Germany by an English Traveller, 1836.

§ Man. Chron., 14th July, 1836.

‖ Mr. Matthias d'Amour, who was a domestic in several great families, thus describes the Laird of Rasay's house, when the family he served paid their visit there, between 1780 and 1790. "All the servants of the establishment, without one exception, lived exclusively on two meals a day, and these meals were composed of thick water porridge and barley bannocks. I had now and then a little exceedingly lean meat allowed me to dinner. Contrary to their customs, I had breakfast allowed me,

rarity in Scotland, and confined to the chieftain's or master's table.* The diet of Dr. Adams was of this abstemious nature, and is represented by his biographer as "a true picture of the life led by many a Scotch scholar."† How different now is a Scottish breakfast, even in the Highlands! but although so varied and abundant from the progress of wealth and individual enjoyment, it is most probable that the earlier generation were as happy with their fare as the present with all their affluent exuberance.‡

The great purpose of our food has been that it should maintain us in life, health, spirits, and strength. That it is highly pleasurable has been added, in the system of our nature, as an additional benefaction; but the utility and the gratification must not be confounded with each other. The pleasing may be mistaken for the serviceable, and then the intended benefit will be lost. The sparing diet has been found to be most preventive of fatigue on a laborious journey,§ and even to be

which consisted of curd of sheep or goat's milk. My supper was of the same material. I commonly dined with a few of the other servants on kail, or the mixture of flour and greens, without even salt."—Memoir of Matthias d'Amour.

* D'Amour so represents it:—"It was very seldom that any meat was left from the first table, and that was so excessively lean that I did not care for it."—Ib. "In 1791, died at Edinburgh James Strachan, aged one hundred and five, a flesh-cadie. He recollected the time when no butcher would venture to kill any beast until all the different parts were bespoken, meat being then an unsaleable article."—Easton's Hum. Long., p. 246.

† "He lodged in a small room at Restalrig, in the northeast suburb, and for this accommodation he paid fourpence a week. All his meals except dinner uniformly consisted of oatmeal made into porridge, together with smallbeer, of which he allowed himself only half a bottle at a time. When he wished to dine he purchased a penny loaf at the nearest baker's shop. He used neither coals nor candles, but when he was chill he used to run till his blood began to glow."—Chambers's "Lives of Scotsmen."

‡ Mr. Frazer thus sketches a modern Highland first repast:—"Take your breakfast now. Excellent mutton-chops, eggs, broiled chickens, mutton, and ham, together with tea, coffee, rich cream, and the best butter possible, composed a breakfast which did not disgrace the name which the Highlanders have deservedly acquired for that meal."—Frazer's Highland Smugglers.

§ An English traveller from Belgrade to Constantinople, in which there were few stages under thirty miles, thus wrote on his journey in 1833:—"I recommend the plan I pursued, not only in this, but in other undertakings more extended. Eat very little, and avoid meat, wine, and brandy. Boiled bread and milk at night; the same in the morning; and bread, steeped in sugar and water, in midday, will be sufficient for your

most refreshing in the vigorous exercise of a hunter among the mountains of Switzerland.* Plentiful eating is, therefore, not necessary to strength or activity. On the contrary, it so usually lessens or counteracts even our mental elasticity, as to have led our fictitious Peter Pindar to his satirical line—

"Fat holds ideas by the legs and wings."

But the indulgence of the feeding appetite is so pleasant that few can resist its allurements. Even the knowledge of its diseasing and sometimes fatal results will not overcome the desire to renew the immediate enjoyment.†

Those who make their diet a predominant object of their daily life will indulge exuberantly in it. The respectable classes at Vienna are represented to us with this propensity, and as making it an earnest object of their attention.‡ It is right, however, to add, that, if they yield to this bodily inclination, so dangerous to continued health, they have been highly

support. I know you will bring from Semlin cold fowl, and ham, and sundry other things; but I had to throw them all away, as they got spoiled. I found that extreme temperance enabled me to support the fatigue."—Morn. Herald, 25th November, 1833.

* Mr. Carne thus speaks of an English navy-captain who had retired to Switzerland to be a chamois-hunter:—"His unfailing resource against fatigue and privation was not the usual flask of brandy or kirch-wasser, but a large lump of white sugar, the virtues of which he extolled to the skies. When hungry or exhausted, he sat down by a brook and devoured a piece of this talisman, and then soon went on with fresh vigour and energy."—Carne's Travels in Switzerland.

† The common dram-drinkers show this effect every day: but one of the strongest instances I have seen of such a deliberate practice of the "Dum vivimus," was mentioned by that clever and humorous surgeon, Mr. Wadd. He was called to a respectable lusty farmer, who had indulged in his strong home-brewed ale till a serious illness came upon him. After some attendance, his medical friend told him it was clear that, unless he left off his favourite beverage, he would not live six months. "Is that your serious professional opinion?" "I am certain of it." The farmer thought a few minutes; tears came in his eyes; he sighed heavily, and at last said, "I am sorry for it—very sorry; it's very hard; but I can't give up my ale."

‡ At Vienna, "eating, everlasting eating, forms with them the chief charm of existence. It is here pursued in a most determined manner. The first day I took my seat in the dining-room of a hotel, the whole group of gourmands, previous to taking their places at table, cast off their coats. On inquiry, I learned that this cool, systematic mode of stuffing is very generally practised throughout the city at this hot season of the year, and even in the houses of some of the nobility."—Strong's Germany in 1831. Another traveller confirms the fact as to the divestment of the coat, but mentions that, in the higher circles, they have a silk vest under it, which is not indecorous.

praised for their general amiabilities.* Some can feed largely, and yet reach an advanced age. Göethe was one of these ;† but as the larger portion suffer or die under such abundance, it is right for us to bear in mind that life may be as happy to all, as well as safer, who accustom themselves to moderate repasts. Instances of such self-restraint in the highest circles, and with the most affluent means, fully prove this to us. It was General Lafayette's habit.‡ The French gentleman who had settled in Philadelphia from Bordeaux, and lately died worth eight millions of dollars, while he treated his friends as liberally as they desired, kept steadily to his forbearing resolutions, in order to avert disease.§ Perhaps if the Americans indulged less profusely in the contrary habit, they would escape those disagreeable inconveniences which in some parts have almost become a national complaint.‖ The unsalutary effects of errors in this respect, in quality as well as in quantity, of what is taken, are not confined to the Columbian conti-

* "The Viennese is as changeful in his passions as he is in his pleasures. He hates and loves a dozen times a day, but he rarely allows the sun to go down upon his wrath. From all that I have heard, I am led to believe that, for kindness of disposition, the people of this city have scarcely any equals. Their charity, too, is as boundless as their patriotism. They love no country half so well as their own, and consider none half so happy."—Strong's Germany in 1831.

† "Göethe ate a great deal, and even when he seriously complained of want of appetite, he often took far more than other younger and healthy persons. He was particularly fond of fish, meat, pastry, and sweetmeats. He never would own to having committed a fault in diet; and his intemperance in eating caused frequent fits of indigestion."—Dr. C. Vogel's Account—his confidential physician.

‡ "He dined at home as often as possible, and his frugal meal invariably consisted of a little fish and the wing of a fowl. He drank nothing but water. I have not the least doubt that his sobriety and temperance, and the regularity of his regimen, greatly contributed to *exempt him from the infirmities* of old age."—Dr. Cloquet's Private Life of Lafayette.

§ "M. Girard died, aged eighty-two. He lived on the most simple food, plainly cooked. For the last five years he confined himself altogether to a vegetable diet, abstaining entirely from animal food, in consequence of a liability to erysipelas."—American Papers, March, 1832.

‖ "There is a fashionable complaint in this country. Everybody has dyspepsy. When I arrived at New-York, all the gentlemen made excuses for their wives not waiting on me, as they were suffering from dyspepsy. I inquired of an old gentleman what this was. 'Why, ma'am, a genteel name for indigestion. We folks in this country, and particularly the ladies, eat too many meals in the day, and they take no exercise except in their rocking-chairs, and no wonder they have indigestion.' When I arrived in . . . . . , I experienced the truth of his observations, for refreshments are brought in at ten in the morning, and go

nent; they have been as strongly described as marking Germany as well as other countries.*

We are apt to mistake the power of eating largely for the utility of the indulgence, and to rejoice in that degree of appetite which induces or enables the individual to make a plentiful meal. In this respect constitutions differ, and the state also of the same constitution at different times, and at the different seasons, or under the various changes of the atmosphere. Each must, in this respect, judge for himself as to the time and degree of the prudential forbearance; but it is serviceable to know, that when enjoyment injures, self-government may restore the comfort.† The fatal effects of undue quantity may, however, occur so rapidly as to give no time for the remedial corrective.‡

The desire to eat is no guide as to the safety or salubrity of gratifying it, and yet the human stomach can, by habit, in some, be brought to bear an enormous quantity, especially in uncivilized life. The Esquimaux have been noticed for this,§

on till ten at night."—Narrative of a Tour in the United States, by a lady. Metrop. Mag., 1832, p. 106. The "particularly the ladies" of the old gentleman looks like the man painting the lion instead of the lion delineating the man.

* Dr. Johnson's opinion of the insalubrity of the German diet at their tables d'hôte is very decided. "Sir Francis Head has remarked that 'the dish which is not acid is sure to be oily. Every loathsome ingredient which the three kingdoms of nature can furnish is crammed into every pot and saucepan. They do not live and thrive on their cookery. They wither and die on it.' He describes much of the curtailment of life and deterioration of health to their complicated cookery, their inordinate addiction to tobacco, to malpropre habits, and the quality of their drink." —Dr. Johnson on the Baths of Pfeffers. Metrop. Mag., 1835, p. 303.

† Horace Walpole's Letter to Sir Horace Mann, in 1752, gives an instance of this: "Your father, who has been dying, and tasted nothing but water for ten days, the other day called for roastbeef, and is well; cured, I suppose, by this abstinence, which convinces me that intemperance had been his illness. Fasting and mortification will restore a good constitution, but not correct a bad one."—H. Walpole's Letter to Sir H. Mann, vol. iii., p. 3.

‡ On 24th December, 1833, "a remarkably fine full-grown boy, aged eleven, dined with his parents on mutton and vegetables, and drank some ale. On the same afternoon he went to his uncle's. He found the family at dinner on roast goose. He took another meal of that, with some ale and sherry, and went home in high glee, trundling his hoop. But in an hour after he was in bed, violent pains in his stomach, and sickness came on. The medical men tried to relieve him, but he died that night in great agonies."—Coroner's Inquest, in public Papers, 5th January, 1833.

§ Captain Parry and Captain Lyon mention that they saw an Esqui-

but they were far outdone by the natives of Siberia.* Yet a Cape Dutchman presents a sort of companion picture in his stage of civilized life. In such habits we see little else than a gorging animal living only to eat.† Individuals with an insatiable craving appear at times among ourselves; but no one can hesitate to refer such apparent gluttony to real organic disease. One of this kind appeared in London a few years ago, who is now dead.‡ Another has lately been put forward to our notice by a public procedure.§

But these extraordinary habits, whether from choice or malady, do not overthrow the general law on which the system of our nature has been formed, that health, safety, and long life shall be the usual reward of habitual moderation, with occasional abstinence.

maux eat with impunity from ten to twelve pounds of solid animal food in the course of a day, and take with it a gallon of train oil.

* "It is asserted by travellers that a Siberian often eats in a day forty pounds of solid food; and Admiral Saritcheff reports that he saw one of that people eat, immediately *after breakfast*, twenty-five pounds of boiled rice and three pounds of butter."—Dr. Caldwell on Physical Education, p. 88.

† "About six in the morning a slave brought me a cup of coffee. This is the first of the many meals they take in the course of the day. At nine they breakfast, and it is a substantial meal of eggs, fish, meat, tongue, or venison ham, besides the usual potation of good tea. This is followed, at eleven, by a tiffin or luncheon. At two, dinner is served, consisting of plenty of all sorts of provisions. At half past three, coffee is handed round, with delicious sweetmeats, which it is the custom to eat with silver tiny forks. At six they assemble to tea; and at nine a good hot supper closes their list of the meals which, in the course of the day, a respectable Dutch family impose upon themselves."—Welsh's Voy. in Chanticleer, vol. i., p. 292.

‡ This was the man called Dando. "He has eaten at one sitting thirty dozen of large oysters,a with a proportionate quantity of bread and porter, brandy and water; but he was one day suddenly attacked with the cholera, and died in a few hours."—Public Papers, 31st August, 1832.

§ He was summoned before the Middlesex County Court for payment by his provider, who stated his daily supply to be a lunch before breakfast, at half past five, of five or seven muffins, with a pint of hot tea to each; at eight, a breakfast of eggs, two rashers of bacon, watercresses, and two hot rolls; at eleven, two hot penny loaves and poached eggs for lunch; at one, a solid dinner; at three, coffee and toast; at five, tea and several buttered crumpets; at eight, six pounds of potatoes; at half past ten, four or five pork chops, with a bottle of whiskey punch taken to bed with him to drink in the night. The man was ordered to pay the sum claimed.—Pub. Papers, 10th February, 1837. But for such a legal process the quantity would be scarcely credible.

a American readers must not forget that "large oysters" in England would be called very diminutive in this country. A man of moderate appetite may eat three or four dozen without exceeding the bounds of moderation.—*Am. Ed.*

Our bodily life and nature can subsist on very little when once accustomed to it.* Fevers are stated to have been cured by mere abstinence,† and Dr. Marshal Hall has so strongly urged a recourse to this natural remedy in several complaints, that I will add his sentiments in a note as well meriting your recollection.‡ A very active, intelligent man of the world, Sir Francis Head, now lieutenant-governor of Upper Canada, has also expressed his sentiments emphatically to a similar purport. With these, as far as my experience has extended, I very much coincide.§ The late Dr. Gregory, of Edinburgh, was of opinion that most of those who could afford it ate twice as much as was really beneficial to them.

It has been commonly thought that strong exercise requires strong food; and yet some sportsmen, whose amusement is sufficiently laborious, have found such diet necessary.‖ Nei-

* "In 1768 died Philip Louher, at one hundred and five, in Shoreditch' London, a French barber. He drank nothing but water, and ate only once a day."—Easton's Hum. Long., p. 109.

† "A German doctor, during twenty-five years' practice, has never failed to cure intermittent fever by strictly and literally starving his patients for three whole days. He allows them only a little water, and, after the fast, accustoms them to food again gradually."—Liter. Gazette, 1835, p. 205.

‡ Abstinence is a very valuable remedy in many of the more chronic forms of disease—in disorders of the stomach itself. To withdraw food altogether for a time would be to employ an actual and a powerful remedy. It is the most direct remedy for plethora, and for disease, or a tendency to disease, in the head. It is the best remedy for apoplexy, and for diseases of the heart and arteries, as Valsalva found, described by Morgagni, l. 2, ep. 17, s. 30. He remarks, that "Dr. J. Johnston has also well touched on this subject."—Dr. Marshal Hall.

§ "I firmly believe that almost every malady of the human frame is, either by highways or byways, connected with the stomach. The woes of every other member are founded on your belly timber; and I must own I never see a fashionable physician mysteriously consulting the pulse of his patient, but I feel a desire to exclaim—Why not tell the poor gentleman at once, 'Sir, you have eaten too much; you've drank too much, and you have not taken exercise enough!' The human frame was not created imperfect. It is we ourselves who have made it so. There exists no donkey in creation so overladen as our stomachs."—Bubbles from Nassau.

‖ "The well-known Mr. Lockley, whose extraordinary feats in the saddle are notorious to all sportsmen, and who lasted past his eightieth year, when he was accidentally killed by a fall while riding after his hounds, performed his hard work chiefly on weak liquids, tea and negus being the prevailing ones. His allowance of wine seldom exceeded the second glass when not in company with his friends, with whom he would indulge to a certain extent. At those times he was shy of animal food. I have heard him say that he could ride more miles without tiring

ther did Dr. Franklin, in his younger days, in the then heavy armwork of a pressman.* Meat diet is used more copiously in England, and especially in London, than in any other part of Europe,† and yet it has a great tendency to cause some of the most distressing complaints of human life, if it be made the predominant diet.‡

The Hindoo practice of subsisting on rice or grain is thought to be founded in its importance to their health in their sultry climate.§ Some experience of this may be the cause of their peculiar diet in some nations. This has been suggested as to the unctuous food of the Esquimaux and Greenlanders. On this I do not pretend to judge. In their icy and steril regions they cannot perhaps get enough of any other.‖

It is not a very large part of the civilized world that lives

on bread and butter and strong green tea, than upon any other diet."—Frazer's Mag., 1836, p. 227.

* Dr. Franklin says, "I worked at first as a pressman; I drank nothing but water. The other workmen, to the number of fifty, were great drinkers of beer. I carried occasionally a large form of letter in each hand up stairs, while the rest employed both hands in carrying one. They were surprised to see that the American aquatic, as they used to call me, was stronger than those who drank porter. My fellow-pressman drank six pints of beer a day. He had need, he said, of all this beer, in order to acquire strength for work." Dr. F. endeavoured to convince him "that there was more flour in a penny loaf than barley dissolved in a pint of beer; and that, consequently, if he ate this loaf and drank a pint of water with it, he would derive more strength from it than from a pint of beer."—Dr. Franklin's Life, p. 79.

† "The annual consumption of meat throughout the several kingdoms is, for each inhabitant in Spain, 22 lbs.; in France, 36 lbs.; in Paris, 86 lbs.; in Great Britain, 92 lbs.; and in London, 143 lbs."—Athen., 1835, p. 228.

‡ Dr. Wollaston says, "Animals fed exclusively on animal food secrete more lithic acid, and *are more subject to calculous complaints*, than those which intermix vegetable and animal diet."

§ "The Hindoos live generally on grain-flour; doll, another grain which, when boiled, becomes a jelly, and is mixed with flour or rice. They have also ghee, a species of butter, but very inferior to real butter, which they use on all occasions; and bread, made into cakes like the Scotch bannock. These are all their articles of food. This plain and simple mode of living suits their particular position and climate, as experience shows that the use of animal food, in so warm a climate, engenders various diseases which the Hindoo is a stranger to."—Journey from Calcutta to Bombay, in Un. Serv. Journ., 1835, p. 42.

‖ Captain Ross remarks, "It would be very desirable if, in a polar region, the men could acquire the Greenland food; since all experience has shown that the large use of oil and fat meats is the true secret of life in those frozen countries; and that the natives cannot subsist without it, becoming diseased and dying under a more meager diet."—Ross's Second Voyage to the Arctic Regions.

much on meat. Flesh diet prevails most in the two extreme portions of human society, the savage and the luxurious. To live on animal bodies, those which man hunts, or kills, or can ensnare, is the rudest state of human nature. The use of agricultural diet, and the practice of husbandry to raise it, are the first steps of the savage to become a civilized man. Both the conditions of the uncivilized, the hunting, and the pastoral states, live mainly on flesh. The North American Indians were large examples of the first, as the Caffres in South Africa, and some of the Tartars, like the ancient Scythians in Northern Asia, subsist on the herds of cattle, with the milk they extract from them. The introduction of corn, and especially of wheat, was felt in ancient times to be such a blessing, that Divine honours were attached to the memory of the individuals to whom it was ascribed in both Greece and Italy. The great majority of mankind have always subsisted on vegetable diet; even the most warlike and vigorous nations.* In our own country wheat bread was formerly the luxury of the affluent. Under the Tudors and before, rye and oats were the chief corn used;† and barley bread, under the Stuarts, was the common sustenance of the lower classes.‡ Nearly to our own times it was the staple food of Cornwall,§ as oats were

* The habit of the Turks, in their days of victory and valour, as to their food, is thus mentioned by Busbequius: "The Turks are so parsimonious that they do not study their bellies at all. Give them but bread and garlic, with a sort of sour milk, known in Galen's times by the name of syllabub, and they feed like farmers, and desire nothing more."—Busb. Travels. The hard and far-riding couriers of Persia travel on nothing more solid. One is thus described as with the usual meal of the common orders: "We settled ourselves on the borders of a rivulet, near a cornfield. The courier took off his horse's bridle, and permitted it to feed on the new wheat. He then took out from the deep folds of his riding-trousers a pocket-handkerchief, in which were wrapped several lumps of cold boiled rice, and three or four flaps of bread, which he spread before us, and added to these some sour curds, which he poured from a small bag at his saddle-bow. He drew out also half a dozen raw onions, which we added to the feast. We washed the whole down with water from the rivulet."—Morier's Haja Baba, vol. i., p. 160.

† In 1596 it appears from Sir Edward Coke's household books that rye bread and oatmeal formed a considerable part of the diet of servants, in great families, in the southern counties of England. In the reign of Henry VIII., our chronicler, Harrison, mentions, that the gentry had wheat for their tables, but their household and poor neighbours had only rye, barley, and oats.

‡ "In the grant of a monopoly by Charles I., in 1626, barley bread is stated to be the usual food of the ordinary sort of people."—Hist. of Mid. and West Ch.

§ Mr. Coode stated to the Agricultural Committee in 1833, that in his

even in Yorkshire.* It was after the accession of George III. that wheaten bread came more generally into use.† But our ancestors were as happy without as we are with it. It is far preferable to any other; but no misery would arise from its absence if it could not be procured. We must not confound happiness with good eating, nor suppose that spare diet, and small quantities or small means need be or are accompanied with wretchedness, or even with discomfort. Mr. Barry, the painter, whom Mr. Burke patronised, told me that he lived on oatmeal and water for its cheapness, and found it pleasant and satisfying. Another gentleman abroad attained celebrity in the arts, whose diet, as he studied, was only bread and water;‡ and Kean, the actor, who came nearest Garrick, avowed himself to have been happier in his greatest poverty than in his subsequent abundance.§ Scanty living is therefore compatible with intellectual improvement and a great enjoyment of life. When ailment makes it most salubrious, I know, by

recollection the Cornish peasantry almost invariably used barley; but that this is used very little now, wheat having taken its place. Other witnesses made similar declarations.

* A recent author says—"Down to the year 1800, the writer of this remembers that oaten bread was commonly eaten by the labouring classes of the West Riding in Yorkshire."—Hist. Med. and West. Ch. When I travelled with a friend over Scotland in 1789, I found the common bread was oatcake. This was usually brought to the table at most of the inns until we asked for wheaten bread, which in some was not to be had.

† Mr. Smith, in 1760, in his tract on the Corn Trade, states, that wheat had then become more generally the food of the common people than it had been in 1689; but, even then, not more than half the people of England fed on wheat.

‡ Brissot says of WINKELMAN, so well known for his "History of Painting," "That able academician, whose life Fontenelle has written, with an income of only 200 livres (about eight guineas), knew how to preserve his independence. In order that he might continue his studies, he opened a school in a village, and likewise provided for the subsistence of an infirm and aged father. WINKELMAN LIVED UPON BREAD AND WATER. His mind was always at work, and he sometimes walked ninety or a hundred miles to see a statue."—Brissot's Life, p. 13.

§ "Edmund Kean, in his youth, was one of a corps of strollers. The company had no regular salary, but divided the receipts among them. Kean's weekly share amounted, on an average, to three shillings and sixpence, out of which he had to find himself bed, board, washing, and clothing, all the necessaries of life, and almost all the trappings of the stage. Yet we have repeatedly heard him declare, even in the zenith of his success, that he WAS A HAPPIER MAN in those days, when he received but three shillings and sixpence weekly as the reward of his performances, than he was when at the head of his profession, and in the receipt of thousands."—Frazer's Magazine, 1833, p. 738

experience, that it is no diminution of comfort, but is a grea friend to mental activity. Want of any sustenance is a de plorable evil; but the use of the simplest, and a lessened pro portion even of this, when indisposition would otherwise pre vail, are soon found to be as satisfactory as they are beneficial The taste enjoys everything that it becomes accustomed to and a conviction of the benefit of what is most serviceable and a dread of the pain and danger which will follow the in dulgence we should avoid, will gradually fortify the mind with resolution to abstain from what would injure, if yielded to.

Plentiful diet, habitually continued, has, in every age, been found disadvantageous after youth changes into manhood, and as manhood advances into age.* Men of the world, as they reflect on their own indulgences and the results, have acknowledged this.† Our medical men have discerned it, and have disinterestedly counselled others to regulate their habits by wise caution and occasional forbearance.‡ It was the experience of the advantage which made periodical fasting once so popular. Much of the derangement which afflicts the better classes of life, many of the unaccountable suicides which occur among those who have every worldly comfort, many of our most painful diseases, most of our bilious and many of our

* The ancient author of Ecclesiasticus thus counsels upon it:—

"If thou sit at a bountiful table, be not greedy upon it.

"Remember that a wicked eye is an evil thing. Stretch not thine hand wheresoever it looketh. Be discreet in every point.

"Eat as it becometh a man those things which are set before thee, and devour not, lest thou be hated.

"Leave off first for manners' sake, and be not unsatiable, lest thou offend. When thou sittest among many, reach not out thine hand first of all.

"*A very little* is sufficient for a man well nurtured; and he *fetches not his wind short upon his bed.*

"Sound sleep cometh of moderate eating. He riseth early, and his wits are with him. But the pain of watching, and choler, and pangs of the belly are with an unsatiable man."—Eccles., c. 31, v. 12–20.

† Lady Blessington describes Lord Byron to have said to her:—"I maintain that half our maladies are produced by accustoming ourselves to more sustenance than is required for the support of nature. We put too much oil into the lamp, and it blazes and burns out; but, if we only put enough to feed the flame, it burns brightly and steadily. We have sufficient alloy in our compositions, without reducing them still nearer to the brute by overfeeding"—Lady Blessington's "Journal," in New Monthly Mag., 1833, p. 42.

‡ Dr. James Johnson's "Economy of Health" contains much valuable and intelligent advice on this subject. There are also many useful remarks in Mr. Robertson's "Treatise on Diet."

nervous agitations, arise from the unintermitted continuity of full hot dinners or meat suppers, and, not unfrequently, to many, from the habit of meat breakfasts and meat luncheons. The effects of each vary on most individuals; and some can gratify themselves as they please, without any perceptible disadvantage. But as this is not the general experience, as years increase it cannot safely be made the general rule. Each, however, must judge and determine for himself. We may suggest precautions, but no one has a right to dictate to another, nor to interfere with his unblameable enjoyments. We all grow up with constitutional peculiarities and differences of habits, which require our self-regulations to be matters of individual discretion.

But it is not perhaps sufficiently observed that the spirits, the temper, the daily humour, and, in time, the predominant disposition, are considerably influenced, at many intervals, by the quantity or quality of our daily food. This was remarked in ancient days,* and both poets and moralists have described the more joyous feelings which accompany a temperate and lighter diet.† Perhaps no greater benefaction has, in the last two centuries, been conferred upon the world, than in causing the civilized nations of Europe to become acquainted with tea, while the Eastern ones were led to the use of their coffee and sherbet.‡ Tea has released us from the heavy potations of our various ales and beers in our morning and evening repasts, and largely contributes to remove that animalizing in-

* Galen, who, like Celsus, was one of the most intelligent of the ancient medical authors, remarks—"Let those who deny that the difference of aliments can render some temperate, others dissolute; some chaste, others incontinent; some courageous, others cowardly; some meek, others quarrelsome; come to me. Let them follow my counsels as to eating and drinking, and I promise them that they will get great help therefrom towards moral philosophy."—Galen. Op.

† Lord Byron also noticed to Lady Blessington—"I think that one of the reasons why women are, in general, so much better than men (for I do think they are so), is, that they do not indulge in gormandizing as men do, and, consequently, do not labour under the complicated horrors that indigestion produces which has such a *dreadful effect on the temper*, as I have *both witnessed and felt*."—New Monthly Mag., p. 42.

‡ "Coffee is always used in the East without cream or sugar. A small saucepan, the size of an eggcup, is placed on the fire till the water boils; a teaspoonful of powdered coffee is put into it, and suffered to make a few ebullitions. It is then poured, grounds and all, into a cup just as large as the saucepan, and in this state, as black, as thick, and as bitter as soot, it is taken with tobacco."(a)—Dr. Walsh's Journey, p. 6.

(a) That is, the tobacco being smoked in a pipe.—*Am. Ed.*

ebriety which even our gentlemen a century ago degraded themselves by practising. It is much used by the Tartar nations, though with additions as singular as many of their other customs. It has there, as with us and all, a socializing effect.* Both tea and coffee are highly intellectual, as well as bodily refreshments, if moderately used, and are very favourable to friendly and intelligent conversation. They give a gentle excitement to the system if not taken too largely, which increases all our activities, without being followed by that penitential depression which many other stimulants occasion.† Some other plants are said to produce nervous emotions of this sort, but none so harmlessly and so efficiently as the liquid effusion from the leaves of the China tea.‡ It will be, therefore, a public benefit if the growth of this can be naturalized elsewhere. Tobacco came into the Western World about the same period, and as a medicine; and occasionally, under adapted circumstances, appears to be very serviceable. But the large and extreme use of it is now found to be injurious to the nervous system, causing a derangement of the general health and an abbreviation of human life.§ Thus, in all things,

* Among the Uzbeks, in the great Tartar plain, watered by the Oxus, "nothing is done in this country without tea, which is handed round at all times and hours, and gives a social character to conversation which is very agreeable. The Uzbeks drink their tea *with salt*, and sometimes mix it with fat; after each person has had one or two large cups, a smaller one is handed round, made in the usual manner, without milk. The leaves of the pot are then divided among the party, and chewed like tobacco."—Burnes's Travels in Bokhara.

† In the Toorkmuns' country, Captain Burnes also met with it, and experienced its animating effects:—"Our food now consisted of bread and tea; we found the diet of bread tolerably nutritive, and had much refreshment from the tea, which we drank with it at all hours. I found that abstinence from wine and spirits proved rather salutary than otherwise. I doubt if we could have undergone the vicissitudes of climate had we used such stimulants."—Ib.

‡ About Fez, in Morocco, "The country grows in abundance, in spring, a narcotic plant called kiff. It is dried, and reduced almost to powder. They boil it, with a good deal of butter, for twelve hours, and strain it. It seasons their victuals, or they mix it with sweetmeats, or swallow it in pills. Others smoke its leaves. It is said, that in whatever form taken, the effect is certain. Its merit is that it does not intoxicate, but raises the spirits, and fills the imagination with agreeable fancies."—The German Year of Liberation, 1813.

§ This herb is used to excess in Germany. "No argument can lessen it. The propensity is declared by physicians to be one of the most efficient causes of the German tendency to diseases of the lungs. Everything is saturated with tobacco. Hence every man, woman, and child acquire the complexion of a boiled chicken. From the hour of their waking to

moderate enjoyment and self-governing regulations are indispensable to lasting comfort and unrepented pleasure.* It is the great purpose of our Creator that we should acquire this spontaneous desire, and power, and habit of self-mastery; and he has made it also one of his universal laws, that whatever is the best for any one to do, and the most salutary for him to use, always becomes, by his adopting and persevering to practise it, as pleasurable as any other thing that would be gratifying, always most enduringly so, and free from the evil consequences by which temporary enjoyments, that bring future evils so often and so generally, sadden human life. It may not be unuseful to you to subjoin the experiments which have been made as to the various digestibility of the different articles of our food.‡

their lying down, which the peasantry do in their clothes, in innumerable instances, the pipe is never out of their mouths. Yet the chief German physiologists declare that it shortens life. They compute that, out of twenty deaths of men between eighteen and thirty-five, ten originate in the waste of the constitution by smoking. The universal weakness of the eyes, which makes the Germans a spectacled nation, is attributed to this cause of nervous debility."—The German Year of Liberation, 1813.

* There seems reason to believe that tobacco may allay hunger, and, for a time, even answer the purposes of sustaining life when food is unattainable. Hearne, in his "Journey to the Polar Sea," mentions, that he frequently was without food for five or six days, in the most inclement weather, but supported the privation, without losing his health and spirits, by smoking tobacco, and by wetting his mouth with a little snow. The Turks never take it with malt liquor or spirituous mixtures, as we and the Germans do, but with their coffee; and Dr. Walsh has remarked, that on a journey, "when used with coffee and after the Turkish fashion, it is singularly grateful to the taste and refreshing to the spirits, counteracting the effects of fatigue and cold, and appeasing the cravings of hunger, as I have often experienced."—Doctor Walsh's Journey, p. 5.

† Dr. Beaumont, of the United States, having the opportunity of introducing food into a young Canadian's stomach, and of withdrawing it as he wished, found that of the—

"FARINACKA.—Rice, boiled soft, was perfectly converted into chyle in one hour. Sago, in an hour and three quarters. Tapioca and barley, in two hours. Bread, fresh, in three hours; stale, in two.

"OF VEGETABLES.—Potatoes, roasted, in two hours and a half; boiled, in three hours. Parsnips and beans, in two hours and a half. Turnips, in three hours and a half. Carrots, boiled, in three hours and a quarter. Cabbage, raw, in two hours and a half; boiled, in four hours; vinegar much assisted its digestion. Beet, three hours and three quarters.

"OF FRUITS.—Apples, sweet and ripe, one hour and a half; mellow, two hours; sour and hard, nearly three. A mellow peach, in one hour and a half.

"FISH AND SHELLFISH.—Trout, boiled or fried, one hour and a half. Codfish, cured and boiled, two hours. Oysters, undressed, nearly three hours; roasted, three hours and a quarter; stewed, three hours and a

LETTER XXXV.

The Supernatural History of the World a real Subject for human Study and Knowledge.—The Hebrew Scriptures are the written Records of so much of it as has been disclosed to us.—Their endless Value to us.—What was done in Judea by the Almighty was done for the Knowledge and Benefit of all.—The Communications of the Deity to us must always be Miraculous.—The true Nature of Miracles.

My dear Son,

It has already been intimated to you that the history of our world is divisible into two distinct compartments—the natural and the supernatural. Each of these is as real as the other, and they should alike be the subjects of our intellectual attention. No intelligent person would desire to remain in ignorance of either; for the absence of either will leave an unavoidable vacuity in his mental store by the deficiency of

half. Bass, boiled, three hours. Flounders, fried, three hours and a half. Salmon, salted and boiled, four hours.

"Poultry.—Turkey, roasted, two hours and a half; boiled, five minutes more. Wild goose, roasted, two hours and a half. Chickens, fricassied, two hours and three quarters. Fowls, boiled or roasted, four hours. Roasted ducks, fours hours; and, if wild, half an hour more.

"Butchers' Meat.—Soused tripe, pigs' feet, boiled or fried, one hour. Venison steak, boiled, one hour and thirty-five minutes. Liver, calf's or lamb's, two hours. Sucking pig, two hours and a half. Mutton, broiled or boiled, three hours; roasted, a quarter more. Beef, fresh boiled or roasted, three hours; lightly salted and boiled, thirty-six minutes more; old hard, salted, four hours and a quarter. Pork steak, broiled, three hours and a quarter; stewed, three hours; lately salted and boiled, four hours and a half; roasted, five hours and a quarter Veal, broiled, four hours; fried, half an hour more.

"Eggs.—Raw, two hours; roasted, a quarter more; soft boiled, three hours; hard boiled or fried, half an hour longer.

"Milk.—Two hours. Custard, baked, two hours and three quarters. Butter and cheese, three hours and a half. Apple dumplings, three hours. Suet, four hours and a half. Oil, somewhat longer. Calvesfoot jelly, half an hour."

"Dr. Beaumont's facts in many points confirm, in others differ from Dr. Paris, Dr. Prout, and Dr. Wilson Philips; but they all agree that venison is the most easily digested of meat; white fowls more so than *brown*; beef than veal; boiled meat more than meat dressed any other *way*; and that oily food is particularly indigestible."—Athenæum, 1834, *p. 286, 7.*

what is omitted. Both must be acquired for the mind to be complete, and both must be obtained by adapted study. No knowledge walks of itself into the human mind; what is most obvious, indeed, is soon discerned, and the easiest and most generally attained. All natural objects of our sight and sense are of this description, so far as they excite sensations in our consciousness; and daily life gradually supplies us, without trouble, with all the information that is necessary to us of this description; but what is more recondite or distant, and to be known by reasoning and inference, or by superior communication, requires closer attention, further search, patient examination, external aids, careful discrimination, and enlightened judgment. The abstruse and the supernatural—whatever does not accrue from present sense, but demands investigation, or must be revealed before we can know—will always be of the latter character, and, therefore, always of the most intellectual species of human knowledge. We all can feel what touches us, or see what is in light before us; but what requires communication, thought, and penetration, will be always a later and less common attainment. The natural will, therefore, be the first stage of our mental education, and the most familiar as well as most universal. It will likewise be the foundation and preparation for all that is beyond it. But the inquiring mind will not be satisfied with what is only a portion of existing reality; it will always aspire to know whatever is additionally knowable. It will, therefore, seek and study the supernatural science of the world we live in, from every source that can impart it to us. The natural is comprised in the material and the human; the supernatural will be that which is beyond these and superior to them; and what is so will be whatever is Divine. The material agencies of nature and human agency produce what is natural, and exhibit this to us; but the Divine agency is alone the cause and origin of all that is supernatural, and from Divine sources we must seek our knowledge of it.

The preceding letters have endeavoured to explain to you the topics of our sacred history which were most connected with the natural branches of it. The system which our Creator has established for the continuance and multiplication of his human populations, the laws and course of their birth and death, the natural economy of their human life, the undying character *of the soul*; the provision made for our continual

subsistence, and for its enlargement as our numbers multiply; the varieties of our food, and the regulations which the healthful use of it requires, have been laid before you, with all their explanatory details. The plans and purposes of our Divine Sovereign, in these departments of his earthly administration, have been also deduced and stated, as the occasions arose for considering them. The principles which were inferred have been elucidated by such facts as would conduce to prove and illustrate them satisfactorily to you; and thus we have attempted to review the most important subjects of the natural division of our general theme. It remains for us now to advance to the other grand department of it to which we have alluded—the Divine or supernatural agencies and interpositions which have been acting in our world, concurrently with its natural causations and their sequences. The Divine topics of human thought can never cease to be interesting to it, from the infinite importance of the consequences which are attached to them; nor will it be possible for the mind to turn itself from them. However unwelcomed or undesired, they will obtrude themselves frequently into the recollection. The possibilities which may spring from them, no human indifference or dislike can destroy. They will come at their own time and in their own way. The future will be a future to us, and must arrive; and we cannot avoid glancing upon it, or extinguish always some anxiety about it. The more intellectual and reflective the general mind becomes, the more what is connected with God and immortality, and with our next state of being and eventual destination, will be a subject of earnest inquiry and frequent meditation. Our common sense will take this direction in proportion as it is more enlightened by knowledge, and as the judgment becomes more expanded and sedate.

That there is and always has been a supernatural system and course of things in the world, seems to be one of the clearest deductions of our reason, from the time that we perceive and believe that our earth, and its living and thinking inhabitants, have been the designed and special creations of an intelligent Creator. Made on a specific plan, and with specific purposes always in view and always in a train of successive accomplishment, they must have a supernatural history belonging to them; for all designs, all plans, all purposes, are only such, according as they have some particular results or

ends in view; without these there can be no design, or plan, or purpose. Such things have always reference to some further thing which is to arise from them, for which they are formed, and to effectuate which they have been adopted and put into action. We know this to a certainty from our unvarying experience in our own and in all other human productions and transactions. If we design, we design something; if we plan, it is to make or do something which we conceive when we plan, and for which we plan. All our purposes have also future results in view, towards which they are directed, and have all a process for their execution. Mind, whether in our Creator or in ourselves, must act on these principles, and to the production and promotion of whatever it devises, intends, or resolves upon. But whatever the Divine power designs, means, or effectuates, must, as contrasted with what man so does, be superhuman—be what mankind do not and cannot do; and when the material structure of nature has been formed, whatever further or extra agencies or operations are introduced into it or effected in it, must be beyond what the established course of nature does or can occasion; that is, it must be supernatural. Therefore, whatever is done in our world after its first creation, and in human affairs after mankind were brought into existence, which neither man nor the material laws of nature could of themselves occasion, must be the results and consequences of a superhuman and supernatural agency, and therefore of that Being who only can exercise such. The description of it will be a description of what is of this character; and the history of its operations cannot but be a supernatural history, or a history of what is supernatural or superhuman. Such a history there must be in the world, if the actions of such agency be anywhere recorded; because, unless the Deity has done nothing at all in our globe or with his human race since the moment of their first Creation; unless from that time he has wholly withdrawn from them and entirely abandoned them, he must have acted, in some respect or other, in and with the natural and human world which he has created. All such actions must be supernatural agency, and all agency becomes the subject of narration or history as soon and as often as it occurs. There may be no historian to observe it and to put it into words and phrases of human language; but there *must be a history of* it capable of being recorded if it

have taken place. The facts, as they occur, present the series and sequences of its history to us. They are the historical elements and materials which have to be clothed in human phrase. They form the actual and the intellectual history of such supernatural agencies, as the words which are employed by any one to communicate them to others, in the order and connexions with which they occurred, become its literary and written history. The events of any one life are the history of that life; but while they remain solely in the individual's own consciousness and memory, they are but its intellectual history, known to no one else, yet as certainly existing as if they were described in alphabetical characters. When the ideal history of any one is meant to be made known to others who may live hereafter, or who did not see what he knows, the facts that were in the individual's experience, and which exist after that only in the individual's mind, are then stated in such conventional words as the society he lives in uses, and as will awake in the minds of those who read the same ideas as are in his own, and as he, from that, expresses for their information. When this is done, the real and ideal history is converted into visible and readable history; and this, upon his death, becomes the only history extant in the world of what he has so done and narrated. If he ever commits the actual and intellectual history to writing, or by words to others who give it a lettered shape, it cannot be known to any one, but remains solely in his own mind, and departs with that to whatever future locality this may be placed in. But still the incidents have occurred, whether he describes them or not. Their reality and their certainty are therefore distinct from his description and independent of it. His narrative and his words are only after appendages to the actual fact. They are but the vehicles of its communication to others, and not the circumstances which they are employed to delineate.

Hence I would allege, that unless the Deity renounced and deserted his earth and human race the instant after he formed them, and has never noticed them since, there must have been his supernatural agency in it, and therefore a supernatural history of that agency to be narrated, to be put into words, to be made known to others, according as he should or should not mean his human creatures to be acquainted with it. If he chose to act without mankind knowing of his operations, then he would not, of course, cause any accounts to

be framed of what he did. But whatever agency he exerted, and whatever manifestations he should make of himself which he wished them to be apprized of, it is obvious that he would select and cause some proper persons to be the human instruments to describe, in human words, such of his operations and revelations as he should intend to be subjects of human knowledge, and the permanent property of human nature.

Now the tendency, and aim, and effect of all our preceding correspondence have been to show, by the contemplation and demonstration of every part of nature, of human life, and of human history, that our world never has been deserted by its Creator, and was, from its beginning, never meant to be so abandoned. They have exhibited plans and purposes extending far beyond the mere creation and the period of its material completion. Its laws have been shown to be those of continued agency, of successive operations, of a course of things requiring steady adjustment, and of perpetual variations, kept always within limits, and harmonized constantly into regular results. The aspect of the whole presents everywhere the features of superintendence, direction, and government—of series, gradations, process, progression, foreseeing purposes, and evolving ends. The moral government of the Creator implies his moral agency in human affairs. There cannot be moral government without moral agency, for all government is agency, and is meaning and observing agency; and all Divine government, whether declared or not, whether seen or unseen, known or unknown, must be supernatural government and supernatural agency; it must, as such, have a supernatural history attending it; and when this is narrated for general or future information, in the words of human language, it will be a supernatural history of supernatural events, or of those which have been done by supernatural agency, and therefore by Him from whom alone such operations can proceed. This will be always distinct from the civil history of the world, and supplementary to it.

That the Deity should make known to mankind all that he does, or thinks, or says, it would be folly to expect. His actions, being always those of a power invisible to mortal organs of sight, can never be in themselves perceived by us; they must be specially described to us for our cognizance of them; and being of this immaterial and intellectual character, only such of them as he thinks fit to be made known to us can appear,

or will be put into a form that we can understand. All the supernatural history which we can have of him and his agency will be that which he selects and determines to be the subjects of our knowledge. When he resolves on such things being a portion of our intellectual information, he chooses and causes the persons he deems fittest to be the human organs and instruments of describing and recording them; and these, in pursuance of such his will, and assisted by his influences so far as these are needed, then narrate them truly in their written compositions to be the perpetual knowledge and instruction of our social and individual world.

To suppose that the Deity meant his human creatures to know nothing concerning him, or his intentions, or wishes, but to be always totally ignorant of his existence, will, or purposes, is incompatible with the idea and belief of an intelligent Creator, of his benevolent nature, of his superintending administration, and of his moral government. But what is inconsistent with these must be untrue, and therefore we may deem it to be erroneous not to conclude that he has both desired and designed to be known by his human race. But, if so, then we may be sure that he has made such manifestations and communications of himself and of his feelings, and wishes and intentions, as would give them just ideas of him, and attach them to him. Whatever precepts and instructions it was necessary to impart to them for their benefit such a Being would not withhold, nor ever discontinue that superintendence and preserving care which their welfare would require.

But to have thus acted, and not have such agency and interpositions narrated in a written history, and thereby recorded for the information of all his human race, would be inconsistent with his own purposes, as well as with the wisdom and benevolence of his nature, and with the philanthropy which such attentions display. He has chosen, since the deluge, to make his human race a series of short generations. This fact alone would make a written history of these special agencies and communications necessary which he desired them to know. If man had been one continuous and immortal being, he would have been always his own historian, and have needed no other. He would have himself beheld all that occurred, and would not have required annals or transmitted accounts of what in any age had taken place. But, living only a limited number of years, each generation dies and departs away with

ll the knowledge it has received; and the succeeding gen-
rations which arise require to have written histories of what
ccurred to their predecessors, or will be ignorant of it. The
istory of all the Divine interpositions becomes, therefore,
ssential to the human knowledge of this by those who live
n the succeeding periods; and, therefore, our reason assures
s that, as certain as there have been special operations and
evelations of the Deity to his human race at any preceding
ras, so certain is it that he must have caused them to be re-
corded for our information concerning them, and must have
aken care that authentic histories of them should always be
n existence, that we may become truly acquainted with them.

This recording history must be in the Hebrew Scriptures,
or there is none in existence; for no other ancient writings
in the world before our Saviour's time pretend to give the
history of the Divine manifestations and revelations except
those books. They carry this distinction inseparably with
them. There is nothing else like them; nothing else of this
sort; no other work, eighteen hundred years old, narrates
the creation of the world, the first state and first ages of man,
the deluge, the division and separation of mankind into dis-
tinct and diversely settling nations, the settlement of the Jew-
ish ancestors in Egypt, the liberation and removal of their
posterity from that country, and the Divine operations and
communications which then and subsequently took place in
the human world. In these we have a series of the supernat-
ural agencies of the Deity, and of instructions and precepts
from him, and of those interferences and revelations which he
chose to exhibit to us. But nothing like these is to be found
anywhere in what has come down to us from the ancient
literature. We may, therefore, always take up these with an
intellectual certainty that we have in them the authentic
narrations of the Divine dealings with mankind, or else that
there is no history of these in existence; which would be tan-
tamount to none having occurred—a supposition in absolute
contradiction with the facts of an intelligent creation and an
intelligent Creator.

From these we learn that it has been his plan to raise up
one particular nation to be the subject of his immediate gov-
ernment, discipline, and instruction; to receive his communi-
cations and revelations; to describe these in written histories
and documents, for the knowledge of all other nations and

ages, and to preserve such records through all the storms, and vicissitudes, and devastations of time and revolutions, so that they might never be lost to mankind, but always remain as the true and authentic accounts of what the Deity has specially done and taught, and has desired his human race to know. The Jewish people have been the nation that was formed and used for this purpose. They have been the depositories and preservers of the supernatural history of the world: and to them we are indebted for all that we know of it until our Saviour came. On them he exercised his immediate government, and manifested the principles and laws on which he conducted it, as the contingences arose which called these into action. By his dealings, and commands, and exhortations, and rebukes, and councils to them, he has illustrated the system and rules on which he guides and carries on everywhere his providential administration of human affairs. All that he performed and inculcated in Judea is a monitory representation to us of the laws and principles of his universal government of human nature in all its populations. He chose to make them and their history the examples and elucidations of the rules, and plans, and purposes on which he conducts his superintendence and government of human nature, in all its stages and positions, although nowhere, except in Judea, was his producing agency made to be sensorially perceptible and specifically avowed.

What has elsewhere been carried on invisibly to mortal eye was in this country, at such times as he thought proper, made manifest to human consciousness, and, in the language of that people, declared and explained. In their emancipation from their Egyptian slavery, the power and operations of the real Deity, the only and all-ruling Omnipotent, were displayed to their sight and hearing. They were taught by their senses as well as by precepts. Their mind and heart were appealed to, that, through them, and from what was done and uttered to them, the reason and the feelings of the human race, wherever those incidents should become known, might be correspondently enlightened and affected.

For one of the first deductions of our understanding from reading the history of these transactions between this nation and the Almighty will be, that there is but one and the same God in our world and in the universe. He exists and governs alike in all ages and places. His moral government must therefore everywhere be founded and conducted on the same

principles. He cannot but be the same Being in every age and country, and always act, feel, and think continuously and congruously like himself. His nature is as immutable as his eternity, and, therefore, in all the moral and intellectual principles of his dealings with the Hebrew nation, we see the rules and principles on which he governs all the sections and generations of his human race; the feelings and intentions which he has concerning them; and the conduct and the obedience which he requires and expects from all.

But, as we read the various books which compose the sacred volume, we find in many parts, and especially in the latter portion, which contains the writings of the prophets, that the Divine topics enumerated extend beyond the Jewish nation, and relate to the whole human race at one period or another, and, at length, to all who shall comprise the ulterior generations who are yet to succeed our own. We find the destinies declared which have been assigned to the kingdoms that have figured in the world before our time, as well as to those which are yet to arise. Hence it is incontestible, that what was done, and then taught and written in Judea, was meant to relate to all mankind, and to be for their information as well as for the knowledge of the people to whom they were immediately addressed. The providential drama, thus exhibited and acted in its successive scenes to the Jewish nation, was intended to be as instructive to us as to them. In all the incidents and promulgations of his will, which there from time to time were effectuated, the Deity speaks to all who may read them, as well as to those who beheld or heard them. By these he represents himself as he is, as he acts and feels, and what he means and desires, and is causing, and will yet produce, to every age and nation that will make itself acquainted with these writings, and from them learn to know him. The historical record transmits the sacred portraiture of God, and of his will, and purposes, and moral government, and providential agency, to every people upon earth among whom this inestimable volume shall be introduced.

On all these Divine subjects of thought and action, the Hebrew Scriptures are sacred and authentic oracles to us. We have no other source of certainty, or even of information, about those ever interesting topics up to the period where they terminate. After them, the Christian writings of the evangelists and apostles, collected and comprised in th[illegible]

Testament, carry on the Divine communications to us, and complete the body of the Divine science, which, in its momentous value to us, transcends all other knowledge as much as eternity surpasses the brief space of our human life.

In the combined volume of both Jewish and Christian Scriptures, we have the whole of the grand truths as to the Divine nature, agencies, laws, meaning, counsels, commands, and purposes which have hitherto been revealed to us. Without these books we should be in utter darkness on all those sublime, attractive, awful, wondrous, and mysterious subjects with which our present welfare, and future hopes and fears, and all that we can desire or expect hereafter, are essentially, and inseparably, and unextinguishably associated. For these reasons I regard them as the most precious possessions which in this world I can hold. They contain the charters of my life and well-being. They are the letters-patent of eternity to us. They present to us the covenanted statutes of our immortal happiness, or of the hopeless loss of it. In them the path of felicity and glory for ever is distinctly set before us. In them I learn to know who and what my Creator and Saviour are; on what principles they govern their moral and intellectual world; what they require of me and promise me; what they have done for me and for all; what they propose and are preparing, both in this world and in the next; what rank human nature holds in their estimation, and to what destinies they are conducting it; and what and where will be its final allocation. Nothing else can give me this inestimable information. To reject it, or to dislike the form in which it comes to us, or to desire that it had come in some other way, and to disregard this because it is not something else, would be such an absurdity in me, such a childish humour, and so contrary to what my judgment dictates, and to the conduct I ought to pursue, that I cannot withhold my belief and confidence in the intellectual treasure which is here made the available property of us all. I would not exchange this conviction for the empire of the world. That would be fugitive and temporary to me. But the Scripture certainties and promised blessings will abide with me, if I can gain them, for ever and ever. Even now they satisfy and enlighten my reason; they sooth and delight my feelings; give me Divine realities to think of, and spred an irradiation on the scenery of future time, which makes death but the portal of a region

of immortality—a silent conveyance to an ever-enlarging felicity. Read and study your Bible with this impression, and with these views, and on these reasonings; and, the longer you live, the more you will appreciate and consult it; and derive, every year of your earthly life, truth, and wisdom, and happiness from it.

I am aware, because, when I was young, I felt it myself, that there is, at first, a kind of indisposition in the mind to think that a miraculous history can be true. We see no such events during our own life, and it seems strange that there were such things in former time. But so, for the same reason, it seemed to me as strange and as hard to believe that such a man, so all-conquering and irresistible as Nebuchadnezzar, did suddenly rise up, and defeat and subdue every nation he attacked; when, lo! as I was meditating on these things, an unknown young lieutenant of artillery, whose very name had been unheard of before, blazed suddenly before us, and, in three or four months, more unexpectedly still, became the conqueror of Italy, vanquished army after army as if he was some great magician, moving and acting everywhere as if with supernatural power. Nothing was more extraordinary or seemed more miraculous, without being really so, to those who were alive in 1796 and attending to political events, than the extraordinary achievements of Napoleon Bonaparte in the spring and summer of that year. I shall never forget the astounding impression they made. I could hardly believe the accounts, however official, which I was almost daily reading. Certainly, taking in all the circumstances, nothing like it had occurred, in the same space of time, in such an age and country, against such adversaries, and with such results, in history before. Events and things are not, therefore, untrue or incredible because they are new, strange, extraordinary, apparently unaccountable, or unlike those with which we are familiar. Impressions of that sort I perceived to be unreasonable, and that they arose from my ignorance, with a degree of cowardice of mind, in disliking to accredit what others doubted or objected to. The spirit arose of examining and judging for myself, and of acting firmly on the results, and of adopting and adhering to what, on fair and enlarged inquiry, I found to be the truth.

The investigations which I then pursued conducted me to the conclusions I have expressed. Supernatural agency I

perceived to be the necessary and natural companion of a providential superintendence and moral government of the world, and of its planned creation by an intelligent Creator. Under such circumstances, its absence would be the incredible thing, not its presence and operation. Natural agencies would be always employed to do what natural causes can effect; but supernatural agencies alone can perform whatever is requisite or expedient to be done beyond the ordinary causes of things. All Divine revelations must be of this nature. The trees, the rocks, the clouds, the winds, or the animals cannot talk to me of God, or make known to me his will. The sun has no articulate voice, nor is the moon a legislator. The fabric of nature can show me the marks and tokens of his creative mind and power, and of the goodness and kindness which directed their operations. But beyond this testimony to his existence and agency in their formation they can give me no intelligence about him; that must be conveyed to us from himself, and the means and circumstances of that conveyance must always be supernatural and miraculous. Miraculous manifestations of himself, miraculous communications of his mind, and will, and laws, and purposes, must therefore have taken place in ancient times, in order that we should be acquainted with what he desires us to know. We can learn this in no other manner. Hence it is one of his grandest laws in his human world, that when his plans and purposes require preternatural interposition of his power, it shall always be exerted; but, with the unusual occasion, the unusual agency ceases, and the extraordinary result no longer occurs. While it acts, it always corresponds with the reason for its occurrence, and with the superhuman impulse which can alone produce it. Such interferences are not wanted in the established course and usual sequences of nature, and are no part of the general plan of its regular phenomena. They come into it, like the comets into our solar area, only when they have specific purposes to fulfil, different from the daily state of things, and which the ordinary agencies and movements are incompetent to effect. It would, then, be as unwise in the governing intelligence not to introduce and commission such operations to cause what he intends, as it would be unnecessary, and therefore not beneficial, to apply this at any other time. Hence no miracles are done for sport or display. None appear like a juggler's tricks or an impostor's knavery. It was

on this principle that our Saviour refused to waste any, merely to gratify Herod or the Pharisees. All his supernatural operations were done with a moral purpose and for a moral end, and guided by an accurate judgment. He did not effect these by violating the subsisting laws of nature, but by enlarging the agency of such as were in operation, or by introducing among these others which were then dormant or of greater power. Keep your mind from admitting the deluding phrase that any miracles recorded in the Scriptures are violations of the laws of nature. There can be no miracle but what is performed by the powers of the Almighty; and what he effects, or authorizes others in his name and as his act to effectuate, is never a violation of his natural laws. It is either an increase of the action of some existing law or means; a bringing into visible operation some latent, or more distant or quiescent law, or a new result from the introduction into the particular locality of some superior law. All these are events which neither the usual mechanism of nature nor human power can occasion. No one part of nature can have any other movements or results than it has been appointed to have. Some extra power must come into it to effect from it an extra effect. Thus, the tree cannot uproot itself, nor throw off its bark or branches, nor saw itself into planks, nor combine these into the hull of a ship or the floors of a dwelling-house. Another power must thus operate upon it for any of these purposes. In these, human mind, will, and agency must work upon it with an intending purpose, and thus new-shape and use it. But where the Divine will intends to accomplish, in any department of his nature, or on any of its substances or individuals, what the established order of things or the skill of man cannot effect, he specially actuates the moving power and material things which are already there or elsewhere in exertion, to act with a new force and in a new direction for the specific completion of the specific end he has in view, and then a miracle takes place. Thus, to make a path for his Israelites through the Red Sea, he caused "a strong east wind all that night"* to operate upon the waters till they were divided and driven up, as into a wall, on each side, leaving a middle of dry ground during the time of his people's passage. When they were safe, the extraordinary action of the suspend-

* Exodus, c. xiv., v. 21.

ing wind was made to cease, "and the sea returned to her strength when the morning appeared;"* its waters sank down to their usual level, and all their natural laws came into immediate operation; and this natural action of these natural laws was quite sufficient to overwhelm the pursuing Pharaoh and all his hosts. No miraculous impulse or energy was then necessary; "the depths covered them; they sank unto the bottom as a stone."†

Thus, all the miracles of God are but an increased action or a new direction given to existing natural laws, which none but he can impart to them; or, if it be more expedient, the local presence and application of a more distant law, which, till thus commanded, was operating elsewhere. This local application, in particular places, of more remote laws of nature, is a part of its established plan. The seaman beholds this in every storm that shakes him. He sees the distant law of nature rise up visibly from the edge of his horizon in a small black cloud. No such is about him as he is serenely gliding on the peaceful wave. But the law that was elsewhere, the fearful agency that can convulse the ocean when it comes over it, soon approaches, and throws into tremendous agitation the floods which it can master while it is acting upon them. At length it departs from that locality, and travels again into a distant region, to produce similar effects there. All rains are of this description. They bring from other parts laws and agencies which were abiding there, either above or beyond, and also the material substance which they actuate into immediate neighbourhood and contact with the district where they fall.

When natural causes move and act only as it has been ordained and provided in the appointed plan and course of nature that they shall move and act, their operation is not miraculous. The miracle begins when that effect begins which the established mechanism of nature cannot produce. This was effected when Elijah, in competition with the priests of Baal, left the decision of the moral contest as to the reality of the Jehovah whom he proclaimed to the displayed will of his awful Master. A local direction was invisibly given by the Supreme Invisible, whom all things obey, to a sufficient body of electric fluid not at that moment there in an accumulated

* Exodus, c. xiv., v. 27, 28. † Ib., c. xv., v. 5.

state; and the fiery stream came instantly from the parts where it was in quiescence or diffusion, and was darted down in obedience to the Almighty mandate upon the altar which it was commissioned to inflame.* Here was no law of nature violated; but a resting and a distant one was brought from another place, and put into such an energy and collective force as accomplished the intended purpose. By doing this, it manifested the reality of the Deity by its presence and operation, because only he could so change its locality, and so immediately and specifically apply it. The people felt this, and expressed their conviction of it from the deciding result.† This is quite intelligible to us by what happens in the operations of man's intelligence. In those grand naval and military operations which are so exciting in history, are instances of this local transfer of laws of nature from one region to another by human agency. It was thus that Nelson carried the tremendous laws of nature, which his ships of war contained in their quiescent state, from the coasts which he had been guarding, across the whole breadth of the Mediterranean, into the Bay of Aboukir, to put them there into that terrific action which first shook the ascendency and power of the French republic, and first checked the, till then, irresistible Bonaparte. So this extraordinary general, at a future day, transferred, with a rapidity almost unequalled, his military laws of nature, instruments, and agencies, from their resting state at Boulogne and elsewhere, to overwhelm so decisively the astonished Mack at Ulm and Menningen. The difference between these operations and the Divine miracles we have been alluding to is, that man has subjected some of the laws of nature to his power, and can use and apply them to a certain extent, and in such ways as these, but no further; and what man and nature can do of themselves is no miracle. It is when laws of nature are used and directed to do what a superhuman and supernatural power and intelligence can alone move and guide them to effectuate, that the miraculous phenomenon appears, and, by appearing, bears in its result, as it were, the inscription upon it, that "The special power of the Deity is specially doing this." He thereby marks incontestably what the Israelites

* 1 Kings, c. xviii., v. 38.

† "And when all the people saw it, they fell on their faces, and they said, 'The Lord, He is THE GOD! the Lord, He is the God!'"—Ib. v. 39.

felt and expressed—"The Lord! He is the God." He ca and will do, at all times, what he shall deem proper. H consults no mortal being as to the period, place, or manner his interpositions. He forms his own plans, executes his ow purposes, and introduces his interferences by his own sacre will and judgment, whenever he thinks them necessary a chooses to apply them.

LETTER XXXVI.

Rise and Prevalence of Paganism in the fifth century after the Delug —Its Deleterious Effects and Self-perpetuation.—Human Causes co tinued, and could not subvert it.—Divine Interposition, by an Intelle ual Process, essential both for Religious and Moral Tuition and I provement.

My dear Sydney,

The supernatural agency which was exerted in the produ tion of the deluge, and of the terrestrial alterations and ne formations of surface which accompanied it, has been alrea stated in the former parts of our correspondence.* Wh the waters had been withdrawn from such parts of the ear as were to be, at that time, inhabited by the renewed race their numbers increased, Noah and his family descended fro the ark, and began the cultivation of the ground from whi they were to subsist. The Deity communicated himself ful to them, and gave them his commands, and promised the his protection and blessings.† But, as soon as the new ge erations arose, he deemed it proper to exert another inter rence in their affairs, and this was to produce that divisi and separation of their general body and social aggregati into distinct portions of population; and to urge these to se tle apart from each other, in order to grow up into independe tribes and nations, mostly, or for a long time, unconnect with each other, as we noticed in the former letters.‡ Amo the consequences of this dispersion was that great divers of habits, qualities, actions, and attainments which in time d

* See Vol. II., Letter XXII.
† Gen., c. ix.
‡ See Vol. II., Letters XXII. and XXIV.

tinguished mankind into two very contrasted conditions—the civilized and the uncivilized. Both these states of society have been also mentioned to you, and an outline was drawn of the principal nations of antiquity which became prominent in the world for their civilizing improvements and intellectual cultivation.*

No further interpositions of Divine agency occurred in the history of mankind from the time of this dispersion for a period of 326 years. During that interval, the human race were left to multiply and act in the several localities of their populations, according to their natural laws and circumstances. The regions of the earth which they were then occupying appear to have been those which lie between the Mediterranean, the Nile, the Euphrates, and the northern mountains of Asia, and principally in Syria, in its largest sense, and in Egypt.

The most remarkable feature at this age of the world, which arose in all these populations, and became the general character of the human mind in that stage of its growth, was a dislike to the actual government of the real God of nature, and a deviation into that theory of Deity, and into those practices of religious worship which we commonly call paganism or heathenism. As Noah and his sons had a clear revelation from God of himself, specially to them, it is difficult, from the absence of detailed history on this point, to account for the origin and universal adoption of such fatal mistakes; except that the moral obedience required by our Creator was then, and has always since been, unpalatable, inconvenient, and unpractised. To reconcile self-will and self-gratification with the uneasy reason and reproving memory, doubts and disbelief were circulated and cherished as to the existing ideas about him; and a different hypothesis was invented by some, and adopted by all, that he either was not in being at all, or was not what he had been represented to be. Other ideas of him were started and encouraged, until the impression became general that such a Being, if he existed, had no concern with our world, but that this contained many gods instead of one, and of a different kind and character from what he had appeared to be. The opinion also arose that these were or could be rendered visible to human sense, and brought to dwell among mankind, and could be gratified and propitiated by hu-

* Vol. II., Letter XXV.

man ceremonies, by offerings of food and fragrance, and by the sacrifice and burning of animals, whose smoke and ascending particles, as extricated by the flames which burnt them, these supposed divinities were imagined to inhale, and to be nourished or pleased by. The sun, moon, and planets, that were discerned to move in the skies above us, were the first objects that were conceived to be the divinities of the world, but afterward other inventions were added to them. Egypt thought that its deities assumed the form of particular animals, and lived in them, and therefore placed these in its temples as the subjects of its worship. But the prevailing tendency was to make human figures of wood or stone, and to suppose that, in these, when placed in consecrated mansions, the divinities they preferred and fancied usually resided. When this custom was established, idolatry was added to polytheism, and the combination of these two systems, in many varieties of theories and imaginations, became the only religion which mankind, as they enlarged, would retain or understand. These inventions excluded and superseded the real Deity in the human mind. Mankind determined to make their gods for themselves, and as like themselves as possible, and to admit and worship no others than such as they thus devised and framed, and made pleasant to their own feelings, and familiar to their daily habits, and with passions, tastes, humours, and senses like their own. They made their gods the image or likeness of man, instead of raising themselves to be what they had been designed to be—the image and likeness of the only real God. It would lead me beyond my bounds to enter into the detail and progress of these absurdities, or to trace them to the specific causes from which they originated, and by which they were modified into all their natural varieties. It is sufficient to state these main outlines to you, and to desire you to remark that the delusion has been so infatuating to the human mind; such a fond and popular persuasion, that it spread over all the world, and has never quitted it. In former times it predominated everywhere in it, and even still reigns the favourite religion of the greatest number of mankind. It rules and darkens the reason, and perverts the feelings in every part of the globe, except where Judaism and Christianity, and their spurious offspring, Mohammedanism, have established their opposing systems.

If the Jewish nation had not been raised up, nor Christian-

ity been revealed and disseminated as it was, the whole human population would at this day have been immersed in polytheism and idolatry, in some forms or other, with all their perverting, distorting, and debasing results. Every nation was so till Christianity penetrated into it, and would be so to this hour if that had not been promulgated. This is a most extraordinary but unquestionable fact. Nothing but the introduction of Christianity by its ancient teachers and missionaries, and its eventual establishment in those countries which received and retained it, could or would have rescued the world from this intellectual degradation and corruption. For, without this, Judaism would have again sunk into the all-surrounding heathenism, and no Mohammed would have appeared. Philosophy would not have in the least improved mankind in this respect; because we see by its writings, which have come down to us, that it was only inculcating atheism, and a contempt of all religion on the one hand; or, on the other, like Antoninus, Plotinus, Iamblichus, Porphyry, Libanius, Julian, and Symmachus, was striving to uphold the favourite paganism by new refinements or additions, and by striving to incorporate with it, for its support, the new and more enlightened ideas and reasonings which increased knowledge was creating. We see, from the experience of our own times, now, that these same results would immediately occur if Christianity were to be expunged. Enlightened France has shown to us that the abnegation and abolition of Christianity would be certainly followed by a general atheism, intermingled with new forms of polytheism and man-invented deities. HUMAN REASON, always a varying, versatile, individual compound of the thinking principle of the human soul, and of the thousands of notions of all sorts which it imbibes, forms, changes, adopts, and retains in the successive periods of its human life, would be made the personal deity of every one. He would know and submit to no other; and, from that alone, the result would be little else than the individual deifying himself. "I God; you God," said the New Zealand chief to the missionary who was addressing him; and this must always be the case where the true Deity is denied or forsaken. Each man thus becomes the god to himself, or will make such a god as best suits and pleases his fancies and inclinations, or as others compel him publicly to worship; and will neither recognise nor like any other.

This general adoption and establishment of paganism was as complete a revolt of the human mind from its Almigthty Sovereign as the Satanic rebellion is stated to have been in his angelic creations. As some of these rose in insurrection against his government, and threw off their allegiance and attachment to him, so the human spirit as decidedly receded from him and forsook him, and set up other things in his stead. They preferred the molten calf, and the idol which they could see, and shape, and treat as they pleased, to that invisible, and moral, and intelligent God, whose very perfections disinclined them at that time to him. They would not admire what they would not exert the self-government to resemble. They dreaded what they would not imitate, and they sought to shun and to forget what they disliked and feared. Yet the impress of Divinity was so strong in all nature around them, and in its influence on themselves, that they could not live in satisfaction to themselves without some substitute. They could not but be religious, although they would not be rightly so. Hence, when they abandoned him, they could not live without some gods, and therefore appeased their natural yearnings for the supernatural by attaching themselves to deities of their own devising and fabrication. It is this monstrous disaffection to the real Lord of Nature which has always constituted the great sin of mankind; the desertion of their Creator and only Divine Benefactor; the disregard of his existence and directions; the alienation of the heart and mind from him; the ungrateful forgetfulness or denial of him; the daily and general indifference to him; while by him every comfort, and pleasure, and benefit have been provided and are continually given which any human creature is enjoying. This is the aggravated, and still too general sin, of every nation on the earth.

This abandonment counteracted and defeated the great plan and purpose of the Deity in the formation of our race. The principle of our creation was, that mankind should know their Maker, and be always in alliance, and friendship, and submission, and attachment to him. It was his wish and intention that they should study his works, learn his will, receive his counsels and commands, imbibe the ideas he should impart, form their own thoughts, and adapt their feelings to these, desire to please him, and live in the constant spirit of affection, and gratitude, and duty to him. On these principles he *would* have been their constant friend, patron, and personal

benefactor. He would have been always instructing, enlightening, and enlarging their individual minds by streams of knowledge and accessions of improvement, according as each became more fitted to receive and use them.

The pagan revolution of their mind broke up this system of human happiness. It dethroned the Deity from his government of society, and deprived mankind of the benefits and improvements which would have followed from it. Instead of associating themselves with his wisdom and blessings, they enslaved themselves to false creations of their own brain, which, being nothings, could do them no good, but with which they soon connected corrupting and cruel superstitions, which brought mental darkness, immoral debasement, intimidation, and frequent suffering upon them.

The system of paganism makes man everywhere his own self-tormentor. It disabled the ancient nations from forming right conceptions of nature and of its operations, and fixed in their minds the most fallacious misconceptions of it. It turned everything into gods and goddesses; sun, moon, stars, mountains, rivers, woods, trees, flowers, beasts, birds, fish, reptiles, and insects; all were set up and worshipped as deities by the most enlightened populations that rose to any eminence and improvement. Thus man became his own worst enemy by this unfortunate revolt from his real God.

He chose instead that which is the perpetual antagonist and suppressor of all knowledge and science; for as paganism cannot keep its hold on the understanding, if it become enlightened with true ideas, and exercised in reasoning rightly, it has always, when once established, prevented and persecuted intellectual improvement. From this cause, even at Athens, it put Socrates to death, compelled Plato to be silent, and made Aristotle an exile from its cultivated but superstitious society. If it operated to these results in that intellectual city, what still more deleterious effects it must have produced and perpetuated elsewhere!

In the fifth century after the deluge, the human mind had spontaneously placed itself in this position, and consigned itself, with determined and persevering self-deterioration, to all its evil consequences, which came rapidly and permanently upon them.

We may do our ancient predecessors the justice of believing that they were not aware of the folly, the error, and the ini-

quity of this extraordinary conduct; because, whatever may have been the case with the first originators, yet, when false theories are once adopted and acted upon, and institutions and establishments raised and fixed in society according to them, the young generation grow up under their influence, are taught to respect and accredit them, have no better knowledge, and cannot get wiser information. The moment what is false becomes popular or is made the practice, the law and the sacred right in any country, the truth, on all that it affects, is banished from that population. The right and true on such subjects are discountenanced as mischief and error. The truth, if admitted, must subvert so much and injure so many, that it is as zealously forbidden and suppressed as if it were a calamity or a pestilence. Hence, when what is wrong has gained possession of the existing mind, its ignorance must be in proportion to the amount of the mistake. In that ignorance, in these errors, and among all their bad feeling and evil consequences, the young must grow up, and, as they mature, they will take the place of their fathers, and be as strenuous opposers and enemies to all that is wiser and better as their perverted ancestors were. They will live and act amid intellectual mists and darkness, which they will be unable to disperse; to which they will become accustomed; which they will even learn to venerate, and value, and uphold; from which they will not desire to extricate themselves; and to which they will adapt their general thoughts and habits, and consequently become what such errors and evils will contribute, by their daily practice and unabated continuance, to cause them to be.

It is thus that paganism has always propagated and perpetuated itself, and never has fallen in any country until the external invasion of some other system, from some other localities, has attacked and overthrown it. Hence the populations of the world, from the fifth century after the deluge, coming into their earthly being amid pagan establishments and systems framed by their progenitors, were trained from their childhood to revere and accredit what enslaved and degraded them. They could therefore know at first nothing better, and, by habit at last, would neither feel nor believe that what they were accustomed to was erroneous. Such a state and practice would unfit as well as indispose them for any different ideas or institutions, and therefore they would transmit authoritatively to their descendants what they had received from

their parents. Thus paganism never died of itself in any land, and only national ruin or extirpation, which destroyed both the establishments in which it was represented and the individual minds which cherished and upheld it, could expunge any form of it from any country, or from the world at large, as far as human causes operated. The perversion, and the depravation and slavery of the human mind to its adopted superstitions, became then complete, and their continuance secured. The very laws of human nature and the legislation of human society then acted to transmit and preserve them.

In this state of things all remedy and change became hopeless, and naturally impossible, without Divine interposition. Hindoostan, and China, and Thibet, and all the Buddhist kingdoms of Asia, and all the states of Africa beyond the Atlas Chain and the Great Desert, are evidences to us how paganism perpetuates itself, and is both unable and unwilling to alter. It cannot enlighten or rectify itself. It never has and never will. Christian minds are striving now to introduce Christianity in many parts; but they are the offspring of a Divine interposition themselves, and carry the results and operations of a Divine agency with them; but there could not have been any Christianity in the world without a Divine interference, nor could anything but paganism have been the religion of mankind after it had contaminated their primitive society, unless the Deity had resolved to make a special interposition, and to commence a scheme and process of Divine agency adapted to meet the circumstances and the evil, which, from that time, would be continued and multiplied with the continuity and multiplication of the human generations.

When this intellectual error had become so general, there was no way to extinguish it immediately or entirely but by another extirpation of the human race; but this would have involved the annihilation of human nature, and have removed such an order of beings out of the grand empire of the universe; for as no renewal of mankind could be brought into existence under more favourable circumstances than Adam was in his Paradise, and the children and descendants of Noah were, with the desolated world around them, as a tremendous monument of the effects of disobeying and displeasing the Deity, another creation of mankind would have only been succeeded by another scene of sin and error, which no destruction of preceding offenders, and no precept or instructions,

or even benedictions, would prevent from arising. It was now obvious that there was something in human nature itself, and especially in the early stage of its existence, and in the generations resulting from that, which made it certain that sin and error would be for a long time the companions of human being; and that these could not be prevented if mankind were to have the liberty of choosing and acting for themselves. As spontaneous beings, thinking and doing from their own desires and resolutions, the renewed world became what it was, and so would any further renewals if the living race were destroyed. To become of that improved nature which in its own free-willing and freely-acting character would obey, revere, and resemble their Divine Maker, and do, and think, and feel as he directed, and always as they ought, was not practicable by the first generations. The gracious wisdom of the Creator perceived that this sublime condition of mankind must be the ulterior result of a great process of gradual tuition, gradual experience, gradual knowledge, and gradually-formed judgment and self-government. He saw and knew that the perfection which he desired and could produce in his human nature must be the effect of progressive attainments and progressive improvements; that it could not arise in the first populations of mankind, but would be long impeded and retarded by the sins, and errors, and ignorance, and deviations of those generations who must arise before the desired end could be brought about. Evil must be suffered to emerge, but be combated as it arose, and allowed to battle also with itself till it produced its own extermination. It is always thus perishing, though, as yet, still reviving in some degree or other. Its recurrences and revivals in new shapes, as the old ones were destroyed, must, therefore, be submitted to, and a series of means be devised and kept constantly in operation which would be always pursuing and suppressing it. These remedial agencies would thereby be always eradicating and diminishing it; and, amid these struggles, would, in their beneficial operation on the human mind and character, be always advancing the regeneration, and be increasing the improvement of the human spirit. But such a process must be one of an intellectual kind, gradual, gentle, persevering, patient, and suited, from time to time, to the state and circumstances of every generation. Violence could destroy, but *would* not educate and enlighten. It could not lead mankind

to the self-reformation and continual self-regulation which were necessary to produce a right-minded being, habitually acting with rectitude of conduct. We must think rightly before we can act rightly, and learn and know what is right before right thoughts will arise in our minds or the right action be performed. Therefore, instead of again obliterating offending man from the earth, the Deity proceeded to institute and carry on a kind and intelligent plan and process for his progressive melioration. This was necessary not only as to the religion of the human race, but also as to its morality.

The abstraction of the mind from God, and its devotion to the chimeras which the fancies of the leaders and founders of the earliest nations invented as his substitutes, not only precluded true piety and rational worship, but also intercepted and prevented the moralization of the world. Man has to learn to be moral, as he has to learn to be skilful in any art or acquainted with any science; but true morality, like true religion, must originate from the Deity, and be at first derived from his instructing precepts. It will not and does not arise in its truth and excellence in its first commencement, nor will it generally prevail or be practised from any other source. It is he who must first teach mankind what they are to do, and what they are to be to please him; to become what he desires, and to fulfil his plans and purposes in our being. None can know his mind and will but himself, except as he reveals it. He must tell to his human creatures what the moral rules, and habits, and qualities, and feelings are which he desires them to acquire and act upon. But this cannot be done or will be uselessly done unless they will receive the requisite knowledge and counsels from him; obey them, when given, because he enjoins them; and make them the guides of their reasoning thought and daily conduct. But when paganism obtained possession of the mind, all moral benefit and influence from his tuition were annulled as this counteraction prevailed. His commands and admonitions became unheeded and neglected when he was superseded; and mankind chose to act as they pleased, independent of his rules and restrictions, and without any regard or reference to them or to himself.

The consequences are palpable in the history of every nation in the world. When the human population ceased to learn morality from the Creator, they could not or would not deduce and establish it for themselves. It is true, that we are so

constituted as to have moral sensibilities and moral capabilities, which often act instinctively; but instinct is not principle, nor is an impulse a habit, nor is feeling the reasoning judgment; but, without principle, reasoning, habit, and judgment, there cannot be morality. This must be taught, and learned, and practised before it can be acquired or retained. Man is so framed as to be impressible and excitable by it, and to feel often the appeals which are made to him for it; but he is also susceptible to every bad impulse and incitation, and also prone to gratify the instant desire or emotion as it arises. He will not and he does not, therefore, willingly submit himself to any moral rules and restrictions, and does not seek to trace them, or to know them, or desire to be governed by them. I speak now of the general world, in all ages and countries; for there are some individuals, at all times and in all places, who cultivate their moral sensibilities, who study moral principles, who love moral qualities, and who train themselves to moral habits; but these are the noble exceptions and anomalies of society, which have become innumerable since Christianity was disseminated, and especially in our cultivated age, but which were very rare before that predominated. What human nature naturally is we see in the uncivilized nations of the world; and in none of them is morality either a study, a part of their knowledge, an object of their cultivation or desire, a rule, or a practice. Each acts as he pleases, and obeys no law but what he likes, and makes his passions his laws and guide. The same spirit and conduct pervade civilized society in all pagan countries. Law and custom are nearly the only sources of all the morals they know or care for, except those influences which the natural affections occasion; and as these are feelings and not principles, they produce no steady moral rectitude of mind, nor are ever reasoned or acted upon as such. The usual morals of all nations, that do not derive them from the religious tuition which they believe to be the will of God, are no more than obedience to their civil laws, the practice of customary manners, and the observance of the rites and superstitions which their priesthood enjoins. The Egyptians had no other, nor the Greeks before Socrates appeared. Some of their more intellectual men had reduced many points of their experience to the short axioms of prudence which sayings and proverbs contain. But for even this they were signalized above the rest of society as the seven

wise men of their age. Yet these were but the acute and praised remarks of able men. These were not taught or made rules of conduct, nor enforced as moral laws or obligations.

It was Socrates who began the practice of reasoning out moral rules and of inculcating principles. Schools of men, thinking and teaching on this plan and subject, arose from him; but so little agreed with each other, either in the rule or in the principle, that they were continually combating each other on both; and thus no obligatory morality was or could be established for the regulation of human conduct by such speculations; nor was anything regarded as such but what the laws of their city or state enjoined; all else was individual choice and fancy, and ingenious discussions and partisan disputes, very rarely influencing the conduct. Alcibiades showed how little he was moralized by Socrates, and Aristophanes indicates to us how little Socrates was revered or cared for as a moral teacher; as the facts and remarks of Thucydides prove how little morality was practised by the Athenians. The difference between the lectures of the philosophers and their conduct is a perpetual subject of satire of their ancient poets and other writers, from Aristophanes to Lucian. The latter brands them all as hypocrites, sensualists, flatterers, and knaves.

Do not mistake me as meaning to say that moral laws and principles cannot be discerned or deduced by the human mind. We see by the recorded conversations of Socrates, the Politica of Plato, the Ethics of Aristotle and Nicomachus, the lost work of Panetius, the Officia of Cicero, the Essays of Seneca, the Meditations of Antoninus, the Morals of Epictetus, and other books of the ancients, as well as by those of the Hindoos and Chinese, and by numerous modern ethical writers of Europe, that many individuals desire to reason on the subject, and can think and write admirably about it. But these various authors, although they agree in several points, yet differ from each other in many more. We also know that men of talent, who reject Christianity, have urged and still urge theories, and systems, and principles of conduct subversive of the most essential rules, and conclusions, and qualities, and habits that have hitherto been deemed virtuous: and they claim to be as right as those who support them. The morality, therefore, which stands on human reasoning or on human authority only, will be as fluctuating as individual taste, in-

clinations, passions, humours, feelings, and worldly interests usually are.

We need to learn from moral tuition three things—how to please God; how to act rightly towards each other; how to use our own senses, powers, qualities, limbs, desires, and faculties as we ought, for our own present and future comfort and well-being. We shall not be with each other longer than we are together in this world, but we shall be in society with some beings or other in the next. We shall be there also ourselves; and the same God will be the God of future time who is the present Deity. Our moral tuition, to be complete, must therefore always relate to both states of our being, and fit us for that which is to come as well as for that in which we are now placed. But this view—the true and certain view of the case—at once shows us that our moral teacher must be God; for who but he knows or can inform us what qualities, rules, habits, and conduct will suit his future world and our position in it! No morality is sufficient which suits this world only; for we may not be here a day, a month, a year, or ten years longer; nor can we command or ensure our stay here one hour or one moment. Our present life is never in our own power to continue, though we may abridge it; therefore, whatever system trains us for this world only is notoriously defective. It will leave the great range of our being quite unprovided for. The morality which does not educate us for that as well as for our present uncertain duration is imperfect and deceptive. It is deceptive if it goes no farther, unless it teaches us where we may obtain what it does not afford; because, without this confession of its insufficiency, and the direction of us to that which will supply us with what we so essentially need; without this, it assumes the aspect of a completeness of which it is entirely destitute.

For these reasons, there can be no true, or complete, or obligatory, or duly-influential, or all-embracing moralization of the human mind which does not come from our Creator and is not inculcated by him. All else will be but habit, custom, inclination, temper, humour, feeling, caution, fear, imitation, or chance with the great body of mankind, and even more commonly with our individual selves, than we like to believe or may choose to admit.*

* With the most reasoning men, moral theories and moral codes can

But all Divine tuition and improvement were lost to the human world as soon as paganism separated it from its God; and hence the process for the recovery and melioration of the human mind, which then became necessary, was wanted as much for the moral illumination and guidance as for the religious instruction of human nature.

LETTER XXXVII.

Mankind unable to liberate themselves from their Pagan Superstitions or from Atheism.—The general Disposition to discredit Specific Revelations.—Divine Agency has been indispensable to rescue Mankind from those Errors and Perversions.

My dear Sydney,

The preceding facts and remarks lead us to the conclusion that the renewed race of mankind, if they had been left wholly to themselves, would have become, as they did generally become wherever thinking and acting solely on their own will and inclinations, a pagan and unmoralized population, grossly superstitious or atheistical, selfish, violent, cruel, fantastical, and corrupt. Such was the general result. Some were more ignorant and animalized than others; brutish in most of their habits; addicted to war and revenge; indifferent to human bloodshed; persecuting, attacking, and deceiving each other; plundering and murdering, or indolent, stupid, and debased. These were the too frequent features of the ancient population, with pleasing mixtures of better qualities in some; and such our contemporaries too much incline to be, in those regions of our present world where paganism, or the abnegation

but be individual argument, individual speculation, and individual inferences, which others may concur in or dispute, and which will always be a subject of ingenious discussion. The attacks lately made on Dr. Paley, one of our wisest moralists, are existing evidence of this fact. If he be right, his opponents are wrong; if their notions are more just, he has erred. So it will always be with all human systems of morality. Human moralists, urging only their reasonings, are intellectual gladiators, successively combating each other before the public eye, frequently gaining temporary victories, but never an acknowledged or commanding sovereignty. Certainty and real obligation will attend wise precepts and instructions only.

or ignorance of the real Deity exists; and where polytheistic and idolatrous or atheistical superstitions have taken his place. It seems a kind of verbal contradiction to talk of atheistical superstitions, as atheism professes to abolish all superstition; but it is not only true that atheism, in all parts of the world, has superstitions peculiar to itself, but there is an atheistical superstition actually established in the earth, with all the artificial rites and costumes of a national hierarchy and worship. This is the Buddhist paganism, in which no deity is taught or believed; where the founder of it, Buddha, is revered himself; and in which demons are accredited and upheld as evil beings, governing or afflicting mankind, and to whom sacred ceremonies of fear or hope are nationally performed. This exists in Ceylon, Siam, and in other regions on the eastern seas.* Atheism in France had the goddess of Reason.

That mankind are unable or unwilling to liberate themselves from such absurdities, such abominations, and such slavery, is a fact which experience forces upon our notice. The continued existence of such a system as the Siamese and Ceylonese paganism proves it; for the priests of this have no small share of understanding, and cultivated acuteness, and worldly knowledge; and both they and their votaries have stoutly resisted all change and improvement. They are still actively opposing the enlightening exertions and example of their Christian masters.† The Japanese, though in many respects a very cultivated people, fiercely maintain their polytheistic idolatry; have destroyed what Christians once were made there, and sternly, with watchful and deadly policy, pro-

* Mr. Gutzslaff, in May, 1831, had lived three years in Siam: he mentions, "All religions are tolerated in Siam, but Buddhism is the religion of the state, and all the public institutions are for the promotion of this superstition. Buddhism is atheism, according to the creed which one of the Siamese highpriests gave me. Their highest degree of happiness consists in annihilation—the greatest enjoyment is in indolence—their sole hope is founded on endless transmigrations—they are firmly assured that, by degrees, in the course of some thousands of years, they will come to be a king."—Gutzslaff's Journal, p. 26.

† A missionary in Ceylon states, "Matura is the place where Buddhism most flourishes—its stronghold. The principal wealth of the district is devoted to Buddhism. Its priesthood, more than 700 in number, is active; skilful and active enemies; almost every village of importance has its priest. We have a refined, metaphysical system to oppose, upheld by men of considerable oriental learning and great acuteness, who also make great professions of sanctity."—Miss. Reg., 1836, p. 152. But, under our government, Christianity is beginning to take root there.

hibit the introduction of all better systems and knowledge than their monstrous and inherited heathenism. The Burmese government has prohibited Christianity and silenced its teachers.* The whole of Africa, south of the Atlas and the Great Desert, is in the same state of mind and feeling. The real Deity is there universally forsaken, unknown, and uncared for; and the most unintellectual and ignorant paganisms, in various forms, but equally absurd, and in some parts sanguinary and inhuman, are resolutely retained.† The Polynesian Islands of the South Sea, and the great continent of Australia, were in the same state until the Christian missionaries visited them. The government of Madagascar now persecutes Christianity, after having allowed it to be taught.‡ Nor is this intellectual depravation the character and companion of the un-

* Mr. Kincaid, the American missionary at Ava, states, "The Mea-wade Woongee has shown himself particularly hostile. Ten times he has forbidden me to preach the gospel or to bring books. The subject has been taken up in the high court of the empire. On 22d March, 1835, a message came directing my immediate appearance before the court. The Woongee there inquired sternly, 'Why have you come to the royal city?' 'To diffuse the knowledge of the eternal God.' 'Dare you say that the religion of the king, his princes, his nobles, and his people is false?' 'No, my lord! but in my own country and in all the world, before the knowledge of the living God appeared, the people worshipped idols; and the command of God is, to go into all the world and preach this religion.' 'Stop! it is not proper to say so much; it is the wish of the king, his ministers, and myself, that you should preach no more.'"—Ib., p. 206. But, as part of the maritime provinces of Burma has been ceded to the English, Christianity is now taught in these, and the Burmese, being a reading nation, receive the books offered them very eagerly. Their religion is Buddhism.

Captain Marryat says, "I never met with a Burman, not even a lad, who could not read and write. I once asked a Burmah soldier what was his idea of a future state; he said, 'I shall be turned into a buffalo, and shall lie down in a meadow of grass higher than my head, and shall eat all day long, and there won't be a single moscheto to annoy me.'"—Metrop. Mag., 1836, p. 193.

† The kingdoms of Ashantee, Dahomey, and others on the Gold Coast have been prodigal in their human sacrifices.

‡ The Cape of Good Hope newspaper, in February, 1836, mentioned that "the Queen of Madagascar had issued an edict suppressing the profession of Christianity throughout her dominions, and prohibiting any departure from the customs of her ancestors." Before this interdict, under the former king, Radama, the missionaries had translated and printed the Scriptures in the Malagese language; all ranks began to learn to read, and applied for those books with such avidity, the Rev. Mr. Freeman says, "that we cannot procure a supply to meet the demand; I think the whole of the rising generations will be readers."—Rep. Bible Soc., p. 77, 1835.

civilized and the ignorant only. In this respect, these only resemble the most cultivated regions of the world, which the sunshine of Christianity has not illumined. Such were the Hindoo populations—a hundred millions of human beings—although the first order of their state was the religious and educated class, and although they abounded with colleges and authors of literative science, and exhibit much controversial ingenuity on what they have manufactured.* Such are still the more informed and more anciently-civilized Chinese. If any nation could reason or enlighten itself out of such pagan darkness and bondage, and free itself from their fetters, and errors, and evils, this great people, a third of all mankind, ought assuredly to do so; for their noblest class is the intellectua and literary order of their society. Men acquire their highest dignity of mandarins by their study of letters and knowledge, and according to their proficiency in their national writings; yet here paganism reigns unshaken and supreme, although a Chinese Socrates did appear among them in their Con-fu-tzee or Confucius, and though many of their authors express admirably some moral truths†. But the government and leaders of this immense and comparatively rational and enlightened nation not only determinedly uphold their national paganism and all its evils, but, after a knowledge of what is better, and even a reading of the books that teach it, prohibit the introduction of the sacred improvement; and this very last year, 1836, has begun a new and inflexible persecution and rejection of the offered Christianity.‡ Thus all the culti-

* To what extravagant ideas their false theories lead their educated men, two instances show:—In April, 1834, a missionary writes from Benares, their chief seat of learning—"Another pundit came up to me, exclaiming, 'God is in me, I am God.'" So, in the August following, two pundits approached him; "one came bawling out, 'I am God, I am God.' 'Well, then, you are an extraordinary man.' 'Yes, God is in me, I am God, and so are you.' 'Do you think that I also am God?' 'Yes, you are God, every one is God.'"—Miss. Reg., 1835, p. 419–20. This is the pantheism of Spinoza, which some of the German unbelievers are teaching their pupils; so nearly are paganism and atheism allied.

† "In the Chinese state religion, the material universe is worshipped as a whole and in detail. Subordinate thereto, they have gods celestial and terrestrial, and gods infernal. When the emperor, as highpriest, worships heaven, he wears robes of azure colour, in allusion to the sky; when he worships earth, his robes are yellow, to represent its clay. When the sun is the object, his dress is red: and for the moon, he wears a pale white."—Chinese Repository, printed at Canton.

‡ "The emperor is called 'The Son of Heaven.' He is the highpriest *of the nation*, and the only medium of communication with the power of

vated nations of the pagan modern world, as well as the ruder and more ignorant, have arrayed themselves against the real God and his revelations as much and as resolutely as the ancient paganisms did, and as all mankind do whom religion does not interest. They prefer their own errors and habits to his tuition—to all Divine truth.

From these examples, now full before our eyesight, we see that human nature, when it has thus once alienated itself from the true Deity, and adopted its own false imagination instead, cannot or will not enlighten, rectify, or meliorate itself. The same fact and certainty appeared in every part and in every age of the ancient world. Egypt was in the earliest times at the head of the human race in arts, in arms, and in all the science which was then known; and her chief order was the educated, the sacerdotal, the only literary class. Did her attainments prevent the establishment and continuity of the grossest superstition? So far from it that no people on earth had grosser. The paintings and sculptures in her temples and palaces, still remaining in their ruins, exhibit this to us. Did she ever abandon them of her own accord? Never; she adhered pertinaciously to them from age to age, and amid all her national changes of dynasties and foreign subjections, till the gradual prevalence of Christianity overthrew them. Did Greece, the parent of the fine arts, of taste, of literature, of oratory, of philosophy, of the drama, and of all poetry, abolish her paganisms and idols from her own choice and enlightened mind? Not at all; she upheld everything, with some modifications, to strengthen them, even while she must have despised them. Atheism made large conversions in her populations, especially after Epicurus; and the numbers increased who disbelieved and derided the national superstitions; but no one abolished them or desired to do so. St. Paul found them in this state, and was opposed by them in the day of the greatest diffusion of their intellectual attainment.* Did other

heaven; and only he and his deputies may offer homage at the court of heaven."—Chin. Rep., January, 1835. As 1836 closed, the imperial decree arrived in England which had been issued in the summer by the emperor for the suppression of Christianity, and for the seizure of foreign books throughout his dominions. Translations of the Scriptures and statements of the Christian religion had been sent him.

* When called before the Areopagus, on the charge of being "a setter forth of strange gods," the effect of his admirable address was, "when they heard of the resurrection of the dead, some mocked, and others said, 'We will hear thee again of this matter;'" but so few were interested

Grecian cities become more rational! So far from it, that at Lystra they chose to consider the two Christian apostles to be Jupiter and Mercury coming to visit them, and stoned them because they refused to be so worshipped.* The pagan system was upheld by common consent; by the belief of the great mass; by its convenience or gratification to all, and for its political uses. This was fully displayed in the polished city of Ephesus, the chief ornament of Asia Minor.† The same questions and the same answers attach equally to the Roman idolatry and superstitions. Its great and enlightened men, though in the latter ages disbelieving what they maintained, and most of them addicted to atheistical theories, yet chose to be the highpriests and augurs of the paganism they scoffed and laughed at with each other; and long bitterly and perseveringly opposed and persecuted the Christian teachers that sought to emancipate the world from such errors and bondage. Their ablest emperors maintained their paganism

to examine or embrace his Divine lessons, that he soon departed from them.—Acts xvii., v. 18-34. "His spirit was stirred within him when he saw the city wholly given to idolatry."—Ib., v. 16.

* Acts, c. xiv., v. 8-20. When Paul had cured the cripple, the public cry was, "The gods are come down to us in the likeness of men." "Then the priest of Jupiter, which was before their city, brought oxen and garlands into the gates, and would have done sacrifice with the people." The apostles rent their clothes with horror at the impiety, and eloquently exhorted them to "turn from their vanities unto the living God, which made heaven and earth, and the sea, and all things that are therein;" but "with these sayings they scarce restrained the people, that they had not done sacrifice unto them;" and as soon as some Jews had spoke, "the populace," having stoned Paul, "drew him out of the city, supposing he had been dead."—Ib.

† See the interesting account in Acts, c. xix., v. 23-41. Though St. Paul was two years teaching there his sacred truths, yet the effect, as he began to make some conversions, was a popular tumult, as soon as it was publicly known that they taught "that they be no gods which are made with hands." "When they heard these sayings, they were full of wrath, and cried out, 'Great is Diana of the Ephesians,'" when a friendly orator would have interfered, "all with one voice, about the space of two hours, cried out, 'Great is Diana of the Ephesians!'" And how did the public authorities appease this uproar? Knowing the imperial jealousy of all clamours and seditions, they reminded the people that "We are in danger to be called in question for this day's uproar," and only quieted them by their officer assuring the mob that their idol and their idolatry were in no danger. "Ye men of Ephesus! what man is there that knoweth not that the city of the Ephesians is a worshipper of the great goddess Diana, and of the image which fell down from Jupiter. *Seeing, then, that these things cannot be spoken against*, ye ought *to be* quiet, and to do nothing rashly."—Ib., v. 35, 6.

to the last, and so did the Roman senate.* Nothing but the imperial power, wielded by sovereigns who had espoused Christianity, could overcome the civil and political hostility.† It is clear that, if our Saviour had not taught his Divine system and spread it among mankind, the ancient paganisms would have still been the religions and the state establishments of the civilized world in its western sovereignties; the barbarous tribes would have equally retained theirs; atheism might have destroyed the belief, but would have retained the system and the practice.

Happily for us, the Continent of Europe and our own country are in a different state. But why are they so? What has overthrown the ancient superstition? What has recalled the human mind to its God? What has abolished the alienation from him in myriads and millions of his human beings, in the last eighteen centuries of their existence, when nothing could prevent or cure it before? Every one may ask the question for himself, and for himself investigate the facts and provide the answer. That it was not philosophy or any improvement of mind, the continuance of all the paganisms in every country, till Christianity predominated in it, and their continuance still in those civilized countries into which it is not yet admitted, fully prove. That their philosophers upheld the paganisms they despised, and resisted, and deprecated, and derided, the great Christian regeneration of human nature, the existing writings or sentiments of Celsus, Antoninus, Pliny, Plotinus, Iamblichus, Porphyrus, Libanius, Philostratus, Lucian, Julian, and many others demonstrate, to all who will read them; nor could it be otherwise. If man will not derive his religion from God, but will make it for himself, he must either live without any, or he must support, and cherish, and practise what he chooses to invent.

The inference, therefore, which from these facts presses upon our mind is, that DIVINE AGENCY, and DIVINE AGENCY alone, could have rescued mankind from these chimeras and absurdities; and that this must have been in operation so succes-

* They imputed their sufferings from the Gothic invasions to the encouragement of Christianity, and petitioned one of the successors of Constantine to restore the altar of Victory and the pagan worship.

† It was not till the reign of Theodosius that paganism was fully removed from the Roman empire. It was adhered to by many able men to the last, until it was made illegal and a subject of judicial prosecution.

sively to eradicate all their ancient forms, which were holding mankind in captivity before our Saviour came; and, by their removal, has made the European continent so pre-eminently intellectual as compared with the other quarters of the globe.

That human agency would not of itself have effectuated this mental revolution and enlightening progression of human nature, seems to be further evidenced to us by what has happened within our own personal experience; for have not those minds which, in our own times, have disbelieved and rejected Christianity, been labouring as steadily, and as earnestly, and, when they have the power, as fiercely and as unrelentingly to destroy it, as Antoninus, Dioclesian, or Julian did? Have not many of the most educated and intellectual men of France, and Prussia, and Germany, and even in our own island, sought and endeavoured to abolish the belief in God and all revealed religion, and all religion whatsoever? Do scientific attainments, or excellence in arts, or literature, or knowledge; do genius and talent preserve the mind from this deterioration and hostility? Are they not even zealously acting to do again what paganism in old times did—to separate the human mind from its Creator, to abolish all belief and idea of him, and to destroy both his influence and his memory in the human world?

The struggle which the opposition of the human mind to revealed religion is still making, and began so strenuously, during the last century, in the leading Christian nations of Europe; and the successes which it has at various intervals during this period obtained, compel me to conclude, that if a Divine agency, though invisible in that form to us, as it is always in nature, had not been counteracting such effects by causing incidents and human instruments to arise competent to check the advancing evil and to preserve the endangered truth, the hostilities waged against it would have subverted it. In the year 1780, the three reigning sovereigns of Russia, Prussia, and Austria, and several of the minor German governments, were inimical to Christianity in their minds and projects, and spread the unbelieving spirit extensively around them. The court and nobility, the literary class, the middle ranks, and even many of the higher clergy in France,* had

* Dr. Priestley mentioned, that on his visit to Paris just before the French Revolution took place, he dined in a party with some of the

adopted the same adverse sentiments, and were becoming zealous to overthrow what their ancestors had cherished; not the mere national form of it, but the substantial reality itself. One mighty spirit of warfare against the Christian faith was taking possession of the European world in the latter part of the last century; and genius, fancy, science, and letters were eagerly co-operating to give it diffusion and efficacy. The theories which were then strongly urged, that all the evils in the world had flowed mainly from religion and government, and were to be removed only by the suppression of both, greatly increased the danger by enlisting the personal interests of mankind in favour of the assault. Great numbers in all countries of intelligent, as well as active-minded men, desired to try the experiment of the change. France took the lead in making it. She overthrew her government and her religion; and, with unsparing violence, put many contrary speculations into practice, which her reason, her passions, and her imagination suggested to her unfettered and excited population. She called on other nations to imitate her example; and, by the long triumph of her arms, put Christianity into a peril which it had not experienced before from the era of its establishment. The British nation was made the great bulwark to save it from the destruction that was overwhelming it. Its sovereign, George III., was sustained in his belief and firm adherence to it, when the other rulers of Europe were alienated from it; and the French nation was suffered to rage and act as it chose, till the enormities and calamities that issued from their agitations produced a general perception, in our happier country, of the misery and crime which the downfall of religion would bring upon every class.

In these events the Divine agency is discernible through its human channels and instrumentalities, and appears also again conspicuous to us in extending now the naval power and distant colonizations of the British nation among the still pagan populations of the world; and in making its high-minded and enterprising inhabitants active everywhere in disseminating the

chief prelates of France. The conversation from the others became an attack on Christianity in general, which the doctor zealously defended; when one of the dignitaries, with an expression of great surprise, exclaimed, "Monsieur speaks as if he really believed it." The impression on Priestley's mind was, from all he saw and heard, that his belief was confined to himself.

Christian faith, with all the civilizations and improvements with which they themselves accompany it. In what they are now doing; in what they achieved for the benefit of all, in the last grand contest for the independence of nations and for the public happiness; and in the prospects opening to us, as time extends its onward flight, we may see a verification of the prophetic declaration, applicable to all nations that will so feel and act, and of late peculiarly true as to the British Islands. "The people that do know their God shall be strong and do exploits."*

My purpose in making these remarks is to lead you to perceive that, as far as human agency, as active and enlightened intellect, as superior science, as great and varied knowledge, as literary exertions of all sorts, and as an unsleeping zeal and unexampled activity, aided by warlike victories, scarcely paralleled before in their number, rapidity, and territorial extent, could have overthrown the only true religion in the world, there has been full reason to suppose that it must have been subverted by their attacks. Human causes alone, if no other had assisted, would not have rescued it. The right inference, therefore, seems to be, that Divine agency, by the human means which it put in action and guided, was necessary to preserve what it had inculcated and established; and that it has been operating effectually to that end.

We may estimate the danger, and from that appreciate justly the need of such influence, by learning that the attacks on revealed truth have been so far successful as to unreligionize nearly a moiety of the French population; for it has been calculated that this portion of them are in the unbelieving state.† The prospect seems not to be much better amid the

* Daniel, c. xi., v. 32.

† M. Thibaudeau added to his "History of the Counsels of France" a statistical summary of religion in the French empire at that time when it included Belgium and the departments of the Rhine:—

Catholics who followed the constitutional priests .	7,500,000
Catholics who followed the refractory priests . .	7,500,000
Persons born of Catholic parents, but following no mode of worship, either through indifference or on account of the interruption and persecution of religion over a great part of the country . .	13,000,000
Persons belonging to no religion whatever, by their manner of thinking and acting	4,000,000
Protestants of various communities. Jews &c. .	3,000,000
	35,000,000

present legislators of our kinsmen in North America.* It is true that Napoleon Bonaparte re-established a Catholic hierarchy in France ; but this was not because he was attached to Christianity, but merely for the political benefits he hoped to derive from it. He avowed this to his confidential counsellor. Theoretically, he was not an atheist ; but, like many who also avow a general theism, he had the same aversion to revealed truths, to all recorded communications from the Deity which they entertain, and from which paganism at first originated.† These facts, combined with the writings of so large a portion of the German clergy, who have treated the Scriptures as mere myths and fables in all their narrations of the

"The truth is, that, as in numerous parishes all over the country there had been no religious worship performed for many years, religious ideas had become very much weakened in the minds of the people."—Thib. Le Consulat, vol ii., p. 169.

* It was stated in November last (1836), at a public meeting at Warrington, that in a late "New-York Observer" it was mentioned, that out of two hundred and ninety-one members of the Congress in the United States, only twenty-one were Christians (*a*)

† After the battle of Marengo, he invited the pope to enter into negotiations on the subject of religion in France. During these he consulted with several of his state counsellors. One of these had a conversation, which Thibaudeau, in his "Memoirs," thus describes from him :—

"After their dinner at Malmaison, the first consul took him alone into the park, and led the conversation to the subject of religion. He spoke at some length against the various systems of philosophers, deism, natural religion, &c., and declared them to be nothing but ideology. 'Listen!' he added ; 'I was walking about this solitary spot last Sunday evening. Everything was silent around me, when the sound of the clock of the church at Ruel at once struck my ear. I felt strongly affected. Such is the power of first impressions and of education. I then said to myself, What influence these things must have upon simple and credulous persons. Let your philosophers answer that. There must be a religion for the people ; but this religion must be in the hands of government. At present fifty emigrant bishops lead the clergy of France. We must destroy this influence ; and for this the authority of the pope is required. People will say that I am a papist. I was a Mohammedan in Egypt, and I shall be here a Catholic, for the good of the people. *I do not believe in religions*, but the idea of a God!' Then, raising his hands towards heaven, he exclaimed, 'Who, then, made all this?'"

So theists in theory only, and worldly politicians reason. They admit a Deity in name, but will receive no precepts or religious instructions from him, and support any solely for its popular effect.

(*a*) Of course the writer of this statement had some limiting idea in his mind, which Mr. Turner has overlooked, or of which he was ignorant. Of the 291 members referred to, probably not one would avow himself not a Christian, although, as in the British parliament and other legislative bodies, the Christianity of a very large proportion would not stand the test of a rigid evangelical inquiry. The remark in the text has no substantial foundation, if applied by way of comparison.—*Am. Ed.*

Divine interferences, lead us to feel strongly that the mai
nance of Christianity, as to its human support, has rested
still rests principally on the British populations, and that
are the present agents and instruments used and directe
preserve and diffuse it.* Others may deem religion neces
for its state benefits; but a political patronage of it, wit
the sincere belief, would not long perpetuate it.†

These circumstances illustrate to us the state and ac
of the human mind in the anterior ages, when it separ
itself from its Creator, and invented and adopted its pa
isms instead; the same disinclination to any specific Di
revelation and the depreciation or rejection of what has
delivered. Thus the primitive descendants of Noah
put aside what had been communicated to him and his fa
as millions now dislike and relinquish the sacred records w
we possess. The principle seems to be the same in
cases. When the atheist or skeptic abandons and expu
from his mind the real God, or disbelieves his existence,
man becomes in his conception, and would so be if his th
were true, the greatest known being in the universe.
then stands at the head of nature instead of God: and
this feeling, the Buddhist system gives him this superi
to all the divinities which others are worshipping.‡ Anc

* Yet it is conceded that America equals, if she does not surpas
other nations in missionary effort.—*Am. Ed.*

† At some moments Napoleon felt that an actual religion was expr
wanted by mankind for its moral utilities—something more than the
leal deism. "On 4th June, 1800, just before the battle of Mareng
wrote from Milan to his two consular colleagues at Paris—'Let the
lets of Paris say what they please, I shall attend to-morrow the
formance of the "Te Deum," in the cathedral.' He went to it in
state, and the next day he summoned the parochial clergy of Milan
told them that he would protect the Roman Catholic religion; addin
any state of society, no man can be virtuous and equitable without k
ing whence he comes and whither he is to go. Mere reason cannot fi
ideas on the subject. Without religion we must be groping contin
in the dark. There can be no good morality without religion. A sc
without religion is exposed to all the shocks of the most violent pass
and falls a prey to the internal discord which must infallibly produ
ruin.'"—Thibaudeau's Consulat, vol. i., Pieces Justif.

‡ The Sanscrit professor, Mr. Wilson, in his lecture on Buddhis
the Ashmolean Society at Oxford, remarked, that the Buddhist p
inculcated the belief in the superior nature of man, made perfect ov
that of the gods, and on this account they neglected and depreciate
Brahminical divinities. Their great figure in all their worship
Buddha, the author of their system, who is still revered in China, J
Ava, Siam, Thibet, and Tartary. Mr. Hodgson, in his papir on

principle equally operates. Revelations from the supreme require us to form and regulate our mind and conduct according to their disclosures, counsels, and precepts. But to such control and government the great majority of mankind have been in every age repugnant; and as by disbelief they get rid of their idea of the obligation, their desire of the independence, and of acting as they please, is a strong inducement to discredit what they dislike. Even theism has the same tendency from similar impressions; for it is obvious, that if no system has been specially revealed and enjoined, all religious ideas and practice, and moral self-regulations must, like the pagan idols and worship, be the mere matters of individual judgment, liking, fancy, choice, and speculation, none of more authority than another, and those of others never preferred by any one to his own.

All these facts and views confirm the impression, that, as far as the human mind alone has acted and would operate, paganism, atheism, and a disbelief of specific revelations have been and would continue to be the exclusive possessors of the social world, and that nothing but Divine interference and agency has rescued mankind from them. This happy result has been effected by that peculiar process which the Divine wisdom has devised and kept in operation; and to the consideration of that we will now direct our next attention.

LETTER XXXVIII.

The Divine Process for the complete Formation of Mankind a prospective and progressive one, foreseen and settled at the Creation to be so. —Their Nature made to be improvable with this View.—The Improvements it had always to acquire.

My dear Son,

The leading feature of the process which has been adopted by the Deity in his intellectual agency and revelations has been their progressive nature, working out good in every

dhism in Nepaul, read to the Royal Asiatic Society, described it to be "in a few words, monastic asceticism in morals and philosophic skepticism in religion."

generation, but producing larger and richer effects in each series of the evolving ages; and operating onward to a grand or ulterior completion, which has not yet been attained; but to which it is steadily advancing human nature and the final population of our globe.

That a progressive course of improvement has been pursued with mankind, we perceive by what has actually occurred. On looking back to the earliest ages of society, and on contrasting these with the world now around us, and by studying the state of the intermediate periods, we see that there has been a gradationary improvement, a successive progression of human nature in all things, from the deluge to our present day. It is most palpable to the common eye in our sciences, our manufactures, our general knowledge, and our multifarious literature. On these there can be no doubt or mistake. Compare Egypt and Phœnicia with Greece—Greece with the Roman empire in its most advanced state—all these nations with our own country and Europe as the sixteenth century closed; and our predecessors all over the world at that time with what we and the country around us now are: compare all these successively with each other, and the progressive series will be as clearly visible to us as the succession of the dawn, the morning, and noontide is to our bodily eye, in every day that occurs to us.

The progression is not less manifest in religion and government—in legislation and morals, and in all the conveniences of life—in taste, judgment, polity, and philosophy—in civilization and refinement of mind, in manners, in elegance, in courtesy, in philanthropy, in general civilization, and in individual benevolence. The more minute and extended our knowledge becomes, both of past nations and of our contemporaries, the more clearly we shall discern the improvements which have been effectuating in human nature, and also the fact that they have been gradually attained; gradual both in the successive acquisitions, and also in the diffusion of them among the various and multiplying populations of the globe. Every individual is in himself a progressive being of this sort, and is, in his own personal experience, an illustration of the progressive advancement of his nature, in the series of the generations which have preceded him, and in the separate *nations* by which he is surrounded.

What has taken place in himself has taken place in his

species at large, so that I consider no fact as more certain in the history of our world than this progressive advance of human nature to its present enlarged and meliorated condition. It is also as manifest that this improving process has not stopped, but is still going on in an accelerated ratio, and with results more rapidly evolving than earth has hitherto beheld. What has been discovered in the Egyptian paintings is no exception to these remarks: they show us the degree of civilization which the renewed world revived from its antediluvian reminiscences. What Egypt had soon passed into Greece, and was there enlarged. That this progression was foreseen by our Creator, and intended by him to take place, and was a part of his original plan of our being, is not only to be inferred from the fact of its occurrence and from his admitted omniscience, but it likewise rests still more satisfactorily on his own revelation of the fact. Our Saviour has declared, that his future kingdom of heavenly felicity was put into preparation at the foundation of the world. His apostles mentioned that the scheme of our redemption was the mystery planned before mankind were created.* Our Lord's advent upon earth was alluded to in the Divine address to Abraham, and in the prediction which the dying Jacob was inspired to utter. The last periods of our human world are expressly delineated by both Isaiah and Daniel, and also noticed and sketched by others of the prophets, and in some of the psalms. These circumstances show that the plans and process of the Deity in the formation of human nature have been prospective and progressive from its commencement; their appointed ends have been designed to be those which would not be accomplished till the latter periods of the human world. These predicted results have not yet been fully attained; but several of the intervening, and immediate, and conducive effects have been brought about.

We have, therefore, sufficient evidence to warrant the assertion, that the formation of human nature to its intended completion and final excellence has been foreseen, and intended to be a progressive and successively enlarging and enriching improvement. The plans and process of the Deity with

* These passages were quoted and referred to in the eighth letter of the second volume of this history, p. 100. They occur in Matt. xxv., v. 34; 1 Cor. ii., v. 7; Rom. xvi., v. 25; Eph. iii., v. 9; 1 Tim. i., v. 9; Eph. i., *v. 4, 11*; *Titus* i., v. 2; St. Peter I., c. i., v. 20.

respect to it must, therefore, be of a progressive nature, and with a gradual operation; producing such immediate results from time to time as were meant in each generation to follow from them; but acting steadily onward, to effectuate their grander purposes and more perfect creations.

We are living now in the thirty-eighth century of the operation of this process, or nearly so; and in what the world now is collectively as a whole, and most strikingly in some of its most prominent countries, we see the admirable effects which have thus far been produced; and we are enabled to discern that others far more brilliant and ennobling are coming into birth, and will be the possession and inheritance of our yet distant posterity.

From this contemplation of what has been designed and of what has been effected, and of what is still pursuing by that Divine agency which alone can accomplish the purposes of Divine foresight, let us now advance to a further consideration of the course and principles by and on which what has been done has been effectuated.

If the human mind has been thus improved, man has been and is an improvable being. Improvability must then be a quality of his essential nature, and he has been created to be of this character. He has not been created a perfect being at his first creation, but as a being that was to become such at a future period, and to be continually advancing to it, by a progressive series of moral meliorations and mental enlargements, until his nature should at last attain the assigned completion. If man had been created to be perfect at the time of his creation, there could have been no subsequent improvement, and no reason for it; nor could he have been improvable. All change of what is complete could only be for the worse. He would, if he had ever been in a full-formed state, have been definitely what he was at once, and so have remained for ever. From that condition he neither could nor would have advanced or altered. But it is manifest that he has been and is an altering being; and therefore he was never intended to be such a fixed and completed being at the commencement of his existence, and has not yet become of this final and stable character.

The very system of his birth precludes the possibility of *such perfection*. What Adam was we do not distinctly know, *though* we may assume that he was as complete and perfect

as a first-made being of the human species could be; but what Adam was none of his posterity could be.

For as to them it was made the law, which has never altered, that they should be born in a baby state, and therefore totally ignorant of all things; feeble, helpless, and with all parts of their body only a portion of their intended size. No infant is in any respect a complete or perfect human being either in frame or intellect: and all mankind being appointed to be born as babes, none were meant to be perfect at their birth; but all come into life on the principle that they shall be improvable into what they ought to be, as far as they are able to advance in their worldly life, and under the circumstances which would individually accompany it.

The consequence of this unvaried law as to our nativity is, that every one is born, and now as much as all were 4000 years ago, an imperfect being—imperfect in all respects when they begin their human life, but continuously improvable from the first moment they breathe and see. They are meant to acquire all that they are deficient in at their nativity as soon and as largely as their country, era, and surrounding society, education, custom, and means of self-formation allow.

Improvability is therefore the law and designation of our created nature; and to improve is its perpetual tendency, and should be regarded as its perpetual duty; for it was manifestly made improvable, in order that it might improve. It was born incomplete with the express purpose that, as it lived, it should gradually attain the completion of what it was capable of. The full formation of our body and limbs our Creator has taken into his own care, and, by the plan and law of our frame, has always secured the performance of that effect. Under these the body grows of itself, without our agency or consciousness, into what it is to be for its temporary earthly life.

But the improvement and completion of our mind or soul he has put into our own power, and required us to attend to and promote it. In this he only aids, and provides the means and materials for us to make use of, but he leaves it to ourselves to seek and apply them, and to acquire the additional qualities and excellences which we ought to possess. Revelation teaches and urges us to attain the largest portion of them that the position of our social life admits of; and also *to make the required* improvement the principle, the aim, the

leading habit of our lives. It intimates that, in proportion to the degree of attainable completeness with which we die, his future favours will be administered to us.

But what are the improvements which we have to acquire, and what are the aids which he supplies to us in the attainment, and what are the means and materials of improvement which he has provided for us?

Born in total ignorance of all things, we clearly have to acquire the knowledge of all that we ought to know. Born atheists from that ignorance, we have to learn his existence and relations to us, and all that he has communicated concerning himself, his creations, our fellow-creatures, and ourselves, and the counsels and commands which he has expressed on all these subjects. Born with quick sensibilities, we have to train these to the right moral feelings. Excitable by everything and to everything, and with limbs capable of every kind of motion and action, we have to perceive how we ought to use all our faculties and powers, to what we should direct and apply them, and from what we should restrain them. We have to learn all the rules and attain all the habits of self-regulation throughout our whole earthly life, so that, as each occasion arises, we may not do to others or to ourselves what will be injurious or offensive, and that we may do in every circumstance what we ought.

Our own well-being is put into our own care, as well as the welfare of those with whom we may be socially connected; and we have to learn to know what we ought to do or avoid for our own sakes, as likewise to live friendly or in peace with others. We are born with a fine intellectual capacity; but which at first is vague, unformed, and general power; and we have to form and exercise this into correct observation and perception, just reasoning, and right judgment. We come into the world without any opinions at all, and we have to acquire right opinions on all things of which we shall become conscious, and on which we shall have to think and act. We have all these things to learn, and to learn for ourselves in the best way we can, from teachers, from example, from customs, and precepts; by observation, imitation, comparison, reading, thinking, judging, and acting, until we become spontaneously, and in our instructed and improved nature, and by *practised habit*, and by immediate and voluntary self-government, *all that* we ought to be, do all that we ought at every time

to do, and know all that we ought to know, in order to have the continual rectitude of mind, feeling, desire, will, and conduct.

Now, as every child has to learn and to acquire all these improvements in our present families, so had every one of the generations which have preceded us upon our common earth. If they had made their full measure of these improvements, we should have come into a rich inheritance of them. But they have left so large a proportion of them unattained, that human nature is still full of deficiencies, which it is advancing onward to supply, and which every individual now living has to lessen in himself, as far as he may have the opportunity or the ability.

But the chief basis of all these in every age is knowledge —that knowledge which we all ought personally to acquire; because without it we can never be, or think, or act as we should do. Just as the child cannot act or judge properly without it, neither can the man.

In proportion as any are deficient in what they ought to know, they are so far still in their baby state. They have their born ignorance and darkness about them, and must think and act correspondently with that destitution.

But this knowledge must, like every other improvement, be a gradual acquisition: what is most immediately essential should be first attained; what becomes necessary in due succession afterward should be sought for in the proper course and order; and if this were regularly and fitly done, and the actions made conformable to the progress, the human mind would grow up steadily to all its required qualities and excellences, as the body does under the guardian and guiding laws which form it, and as the stately tree advances with uninterrupted certainty and expanding efficiency; never vacillating or inconsistent, but reaching in due time its ordained perfection, and retaining it unchanged as long as it is its settled nature to last.

But who must be the first teacher, and what the first knowledge to acquire? In our late epocha of the world, we have streams of knowledge of all sorts flowing about us and to us in ten thousand currents, and bringing with them all sorts of things, good and bad, the workmanship or effusions of our predecessors and of ourselves. The primeval ages had none of this. They had everything to find out or learn, and they could have *no instructer* but nature, which is passive and

dumb, and was always to be observed, studied, interpreted, and understood; and THEIR CREATOR, who began to teach and meant to teach them, but from whom mankind so early turned, and with such determined and persisting alienation, that from him they would learn nothing. This compelled him to choose his own means and process for their improvement and benefit against their will; and to lead human nature, notwithstanding its aversion to the teacher, to the progressive and ulterior completeness which he meant it to attain.

To these means and process let us now direct our thoughts.

LETTER XXXIX.

A Delineation of that Part of the Divine Process which was comprised in the Formation, Establishment, and Instruction of the Jewish Nation.

MY DEAR SYDNEY,

The process adopted by the Deity for the benefit of his human race, after their defection and alienation from him, is displayed to us in the Hebrew Scriptures, from the account of his address to Abraham to the last enunciation of his will and purposes by the prophet Malachi.

The Divine communications to mankind closed with this prophecy in that period of the world, and no further Divine interposition or supernatural agency was perceptibly exerted on our earth until the appointed time of our Saviour's birth approached.

A new series of Divine agency then commenced, which the Christian Scriptures narrate to us. They disclose a new and extended process of the Divine wisdom as then put in action, which has since been in constant intellectual operation, and under whose continued agency we are now living. We see not the directing hand nor the influencing power by our material organs of vision. But the mind that duly studies the effects which arise may trace and discern them, and will find daily delight in contemplating their widely-augmenting efficiency.

The scheme of the process was to select one individual from the revolting world, and to train him and his immediate descendants into a full and intimate knowledge of the Deity as a personal God; interested with his human world, desirous to teach and determined to superintend and govern it; and, by a series of incidents in their own biographies, to make them sensorially acquainted with their Creator, with the principles on which he should govern human life, and with the rules, and ideas, and feelings on which he required them to act towards him and towards each other. From the family thus instructed he planned to raise a nation with whom he should deal, and whom he should continue to teach and guide in the same immediate manner; and, in the various events which would occur in their national and individual conduct, to make such successive manifestations of himself, of his power and agency, of his mind and will, of his plans and purposes, of his counsels and precepts, and of his general and particular government of the world, as would infuse into the human mind, by due degrees, a true knowledge of him, and right ideas and feelings concerning him. By these the moral intellectual formation of human nature would be gradually advanced, at first in Judea, and afterward in the rest of the world, by the consequences that would follow, as these transactions and revelations became known elsewhere, and as further operations of the Divine agency in the world should introduce further knowledge and larger effects. Thus the truths which the rest of mankind were persistingly refusing would be gradually brought to them through this peculiar channel, to be enjoyed by all when they should, in the course of time, become willing and more fit to receive it.

Abraham was the person selected to be the subject of the commencement of this grand process. He was separated from his kinsfolk and fellow-citizens in order to live at a distance from them, and was informed by the Deity that his posterity should be raised into a great nation.* A momentous appendage was annexed, that all mankind would receive a peculiar bles-

* The Lord said unto Abraham, "Get thee out of thy country, and from thy kindred, and from thy father's house, unto a land that I will show thee." This was the command. The consequence and reward of his obedience to it was then added: "And I will make of thee a great nation: and I will bless thee, and make thy name great, and thou shalt be a blessing."—Gen. xii., v. 1, 2.

sing from them.* He was made to go into Egypt for his improvement, and for benefit as to property; and to move from place to place that he might not settle, by a fixed residence, into an assimilation with any existing population, and also to divest him of his erroneous ideas, and to wean him from his former pagan and other habits. That his mind might be adequately improved before he became a father of the new race that were to be the peculiar people of the Divine tuition, twenty-five years elapsed before the promised child was given to him.† In the mean time he had another, who was designated to be the ancestor of the important Arab nation.‡

To establish in his mind a full idea and lasting impression that the Deity was a personal God, and meant to act as such to the human world, and desired to be so considered, it was necessary that the Divine nature should enter into a certain degree of familiar intercourse with Abraham and his first descendant, because this only would produce the intended effect. There is and always has been among mankind a great indisposition and unwillingness to conceive or believe in the actual personality of the Deity. The general notion, both among men of science and others, is rather that of an abstract power; of some undefinable and vague mightiness reducible to no distinct idea—an omnipotent something existing everywhere, yet in no locality—an incomprehensive agency, without any individuality—a theoretical Deity, but no personal being; nor as having a decided moral and intellectual character, with feeling, thought, reasoning, and will, analogous to what appear of this description in human nature, though infinitely superior in quality and degree. Such notions make him little more than a name, and neither interest the human heart nor lead the human mind to the conception and belief of an intelligible and individual reality. The idea and feeling of a personal God were therefore produced permanently in Abraham and in his grandson Jacob, by those condescending appearances and in-

* "And in thee shall all the families of the earth be blessed."—Gen. xii., v. 3. This great promise was more fully elucidated by a subsequent declaration to him, that it extended to some descendant of his race. "In thy seed shall all the nations of the earth be blessed," c. xxii., v. 18. In these words it was repeated to his son Isaac, c. xxvi., v. 4.

† He was called from his native country at seventy-five, and Isaac was born when he was a hundred.—Gen. xxi., v. 5.

‡ Gen. xvii., v. 20. See the second vol. of this history, Letter XXVI., *p. 391–412.*

tercourses which are recorded in the Book of Genesis. These brought the Deity within their sensorial perception, and began that difference between the God of the Scriptures and the vague, indefinite, and theoretical Deity of the general world. It is his recorded manifestations and transactions which give the fullest and most impressive ideas of his moral, intellectual acting and governing reality. In these he always appears, speaks, and acts as a personal being, with feelings, thoughts, and faculties of which he has made ours a dim likeness and representation; but with which, though in that inferiority in which all created beings must always be, with regard to what in him is infinite and perfect, ours have a congeniality in nature. Our spirit was breathed into our mortal frame from himself, and therefore, in its essential qualities, must always partake of his Divine nature, and was declared and meant to be a human image of it.*

In three great principles Abraham was educated by God: in faith, in obedience, and in a knowledge of the actual attention of the Supreme to human conduct, and of his displeasure at the moral vices. Abraham was taught and exercised into a belief of the reality and true nature of God; and of his providence and moral government, and of his exerted foresight, and forming plans and purposes for great and distant objects in the human world; and of his veracity and determination to fulfil what he promised and to accomplish what he foretold. The faith of Abraham also extended to an implicit reliance and confiding assurance on the Divine declarations and predictions, and was always accompanied with willing, ready, submitting, and immediate obedience. In this Abraham differed from Adam, and showed by that difference a great improvement in human nature. Abraham heard the enunciation of

* The beginning of this special intercourse of the Creator with his creature, in which he established himself in the relationship of a personal God to his selected servant and his posterity, is thus described.

"When Abram was ninety years old and nine, the Lord appeared unto Abram, and said unto him, 'I AM THE ALMIGHTY GOD. Walk before me and be thou perfect. And I will make my covenant between me and thee, and will multiply thee exceedingly.

"And Abram fell upon his face, and God talked with him, saying, 'As for me, behold my covenant is with thee, and thou shalt be a father of many nations, and kings shall come out of thee. And I will establish my covenant between me and thy seed after thee in their generations for an everlasting covenant, TO BE A GOD unto thee and to thy seed after thee.'"—Gen. xvii., v. 1–7.

the Divine commands with a persevering resolution to obey them, and always performed what was enjoined.

Obedience was with him always associated with his belief, and in this his conduct is an example to all. The apostle says, "Abraham believed God, and it was counted unto him for righteousness."* He therefore exhibited both the Divine effect and the true nature of religious faith. The Divine effect, in the Scriptural doctrine, that faith is the justifying principle of man with God; and the true nature of the faith which is so, by showing us that it must always be the faith which obeys while it believes.

Abraham's belief was counted to him for righteousness, because he always acted upon it, and was most emphatically blessed for doing so in the most severe trial of his obedience to which he could have been subjected.†

The third great principle was inculcated by the destruction of Sodom and Gomorrah, because they were "wicked and sinners before the Lord exceedingly.‡ It was so important in the Divine plans as to human nature that he should be known to require moral virtue from mankind, and that vice was offensive to him, and would be visited by penal consequences, that the Deity chose to make a personal annunciation to Abraham of the catastrophe he was about to produce, and his reason for inflicting it.§

He made this communication expressly because he knew that Abraham would teach his family the lessons he received.‖ That the moral cause might be fully understood, and that its occurrence might create no diminution of the certainty of the

* Romans vi., v. 3.

† This was in the probationary command to offer his son as a burnt-offering on Mount Moriah. Abraham obeyed with steady resolution and resignation, and, when the Deity intercepted the consummation of the sacrifice, he attached his immediate benediction to the obedience. "BECAUSE THOU HAST DONE this thing and hast not withheld thy son, thine only son, I will bless thee, and will multiply thy seed as the stars of heaven, and in thy seed shall all the nations of the earth be blessed, BECAUSE THOU HAST OBEYED MY VOICE."—Gen. xxii., v. 16–18.

‡ Ib., c xiii., v. 13.

§ "And the Lord said, Shall I hide from Abraham that thing which I do; seeing that Abraham shall surely become a great and mighty nation, and all the nations of he earth shall be blessed in him?"—Ib., c. xviii., v. 17, 18.

‖ "For I know him, that he will command his children and his household after him, and they shall keep the way of the Lord to do justice and *judgment*."—Ib., v. 19.

merciful nature and goodness of God, and of his long forbearance and unwillingness to exercise his chastening power, Abraham was permitted to reason with him on the subject, and to suggest that all were not guilty, and that the evil portion should be spared on account of the unoffending, and that these might not suffer.

"And Abraham drew near and said, Wilt thou also destroy the righteous with the wicked? Peradventure there be fifty righteous within the city: wilt thou also destroy and not spare the place for the fifty righteous that are therein?

"That be far from thee to do after this manner, to slay the righteous with the wicked: and that the righteous should be as the wicked, that be far from thee: Shall not the Judge of all the earth do right?

"And the Lord said, If I find in Sodom fifty righteous within the city, then I will spare all the place for their sakes."*

Abraham, with great reverence of mind, persevering in his noble and generous philanthropy, ventured to reply:

"Behold, now, I have taken upon me to speak unto the Lord, which am but dust and ashes. Peradventure there shall lack five of the fifty righteous: wilt thou destroy all the city for lack of five? And he said, If I find there forty-and-five, I will not destroy it." Abraham's last entreaty was, "Oh let not the Lord be angry, and I will speak yet but this once: Peradventure ten shall be found there.

"And he said, I will not destroy it for ten's sake."†

The process pursued in forming a people from Abraham's posterity, and of rearing it in Egypt, and, when its numbers were sufficiently increased to found an independent nation, of liberating it from its subjection to that civilized, and then predominating but paganised kingdom, you have detailed in the books of Genesis and Exodus. A brief outline of it and of their history was presented to you in our last correspondence.‡ I will not enlarge upon it here, but only observe, that by the miracles attending the Exodus, the Deity displayed himself to be the commander and ruling sovereign of every element and kingdom of nature with which our globe is connected. Its vegetable and animal compartments; earth; the river; the atmosphere; the tremendous electrical power; the sea in all its mass, and instantaneous death were made to operate as he directed.§ All that Egypt was worshipping were shown to be subject to his will, and all were compelled to be instruments

* "Genesis, c. xviii., v. 23-26. † Ib., v. 27-32.
‡ Sacred Hist., vol. II., letter VI., p. 88-90.
§ Gen., c. xli. *Exodus*, c. vii.-xiv.

of suffering to them, that the delusion of fancying them to be divinities might be dissipated.

The next portion of the Divine plan was to lead them into the Arabian desert, and there to reveal himself in tremendous majesty to the whole people at Mount Sinai, and by a personal and awful voice intelligible to them, to proclaim the four great precepts as to their conduct to him, and the six others on the main subjects of the conduct of mankind towards each other which constitute the decalogue. He then made himself their immediate sovereign, established the form of their civil government subordinate to him, appointed all the civil and social laws which were to be their public legislation and private morals, and likewise instituted that mode of worship by which they were to address themselves to him. This he made to consist of two great divisions—supplication and thanksgiving. He formed their public rites of that nature as to cause them to present themselves to him as offending creatures, needing his forgiveness, and petitioning for it, and offering sacrifices of living animals as an atoning medium by which they were to obtain it. He required them to recollect continually that he was their preserver and benefactor, and to express their gratitude to him by their offerings and verbal adoration.

It was also made his grand moral command that they should cherish the feeling of affection to him in its utmost ardour. The principle of their actions and feelings towards each other and all human kind was made to be that habitual benevolence and philanthropy which would resemble and equal their own regard for themselves.* Under this system he established them in the provinces of Palestine or Canaan, displaying in their settlement another example, for their admonition, of the calamities which he brought on nations when they became universally impious and wicked.

He made their own happiness and national prosperity dependant on their obedience to him. This principle of his determined administration of their state, and of every other, was announced in his name by Moses to the Israelitish nation on various occasions, and most emphatically in his last address to them. He had told them that by steadily cherishing and

* *The last* four books of the Pentateuch have preserved to us the full *detail of all these* circumstances.

obeying the counsel and precepts he gave them, they would become, distinguishingly, a wise and intellectual people.*

He likewise had declared to them, that if they would thus conform to the wishes of their God, it was the Divine intention to regard them as his peculiar people; to exalt them far above all the other nations of the earth in honour and celebrity; and to make them eminent for their moral sanctity among mankind.†

This splendid destiny he exhorted them not to lose. He repeated his assurance of it,‡ with continual blessings from their Almighty sovereign in every earthly comfort and prosperity, if they would be faithful in their attachment and duty to him.§ But if they deviated into the contrary conduct; if they would not observe the laws and institutions, nor obey the commands, nor cultivate the true worship of their instructing and legislating God, then national afflictions, foreign conquerors, and a civil dissolution were to befall them on this account and from this cause,‖ their capital and other fortified

* "I have taught you statutes and judgments, even as the Lord my God commanded me, that ye should do so in the land whither ye go to possess it. Keep, therefore, and do them; for this will be your wisdom and your understanding in the sight of the nations, which shall hear all these statutes, and shall say, Surely this great nation is a wise and understanding people."—Deut., c. iv., v. 5, 6.

† "The Lord hath avouched thee this day to be his peculiar people, as he hath promised thee, and that thou shouldst keep all his commandments; and to make thee HIGH ABOVE ALL NATIONS which he hath made, in praise, and in name, and in honour; and that thou mayst be a holy people unto the Lord thy God, as he hath spoken."—Ib., c. xxvi., v. 18, 19.

‡ "And it shall come to pass, IF thou shalt hearken diligently unto the voice of the Lord thy God, to observe and to do all his commandments which I command thee this day, that the Lord thy God WILL SET THEE ON HIGH ABOVE ALL NATIONS OF THE EARTH." "And all people of the earth shall see that thou art called by the name of the Lord; and they shall be afraid of thee."—Ib., xxviii., v. 1, 10.

§ "And all these blessings shall come on thee, and overtake thee, if thou shalt hearken unto the voice of the Lord thy God. Blessed shalt thou be in the city, and blessed shalt thou be in the field! Blessed shall be the fruit of thy body, and the fruit of thy ground, and the fruit of thy cattle; the increase of thy kine, and the flocks of thy sheep! Blessed shall be thy basket and thy store! Blessed shalt thou be when thou comest in, and blessed shalt thou be when thou goest out! The Lord shall command the blessing upon thee—in all that thou settest thine hand unto."—Ib., c. xxviii., v. 2–8.

‖ The 28th chapter of Deuteronomy details the maledictions that would pursue them if they forsook and disobeyed the gracious Being who called upon them to become his favoured and peculiar people. The moral reason is thus explicitly declared: "All these shall come upon thee, *and shall pursue thee*, and overtake thee, till thou be destroyed;

cities were to be besieged and taken,* and they were to be driven from their native land, and extenuated to a small number,† and to be dispersed all over the world, but find rest, comfort, peace, and settlement nowhere.‡

Another great principle, also announced by the Deity through Moses to his people, for the instruction of all mankind, was, that the abandonment of the transgression, and the repentant mind and feeling for having committed it, and the sincere return to their sacred duties, should always end the displeasure, procure the forgiveness, and regain the favour of their God. This was emphatically declared to them with impressive kindness,§ and made, as it were, one of the laws of the connexion between him and them, and intended to be equally so between him and all mankind.

The extension and application of this important principle of the Divine plan and conduct of all the populations of mankind were in an after age explicitly inculcated by the prophet Jeremiah. He was directed to proclaim it in the name of the Deity, as the general rule of his providential administration in continuing or subverting the dynasties or empires on the earth.‖

BECAUSE thou hearkenedst not unto the voice of the Lord thy God, to keep his commandments and his statutes which he commanded thee."—Deut., c. xxviii., v. 45.

* "A nation of fierce countenance, which shall not regard the person of the old, nor show favour to the young, shall besiege thee in all thy gates, until thy high and fenced walls come down, wherein thou trustedst, throughout all thy land. If thou wilt not observe to do all the words of this law that are written in this book, that thou mayst fear this glorious and fearful name, THE LORD THY GOD."—Ib., v. 50, 52, 58.

† "And ye shall be left few in number, whereas ye were as the stars of heaven for multitude; because thou wouldst not obey the voice of the Lord thy God. And ye shall be plucked from off the land whither thou goest to possess it."—Ib., v. 62, 63.

‡ "And the Lord shall scatter thee among all people, from the one end of the earth even unto the other. And among these nations shalt thou find no ease, neither shall the sole of thy foot have rest. And thy life shall hang in doubt before thee; and thou shalt fear day and night, and shalt have none assurance of thy life."—Ib., v. 64–6.

§ "But if from thence thou shalt seek the Lord thy God, thou shalt find him, IF thou seek him with all thy heart and with all thy soul. When thou art in tribulation, and all these things are come upon thee, even in the latter days, if thou turn to the Lord thy God, and shalt be obedient unto his voice, for the Lord thy God is a merciful God, he will *not* forsake thee, neither destroy thee, nor forget the covenant of thy *fathers* which he swear unto them."—Ib., c. lv., v. 29–31.

‖ "*Then the* Word of the Lord came to me saying, O house of Israel!

The Deity acted upon this principle towards the Jews several times between the death of Joshua and the accession of Saul, as narrated in the book of Judges, and frequently afterward. It was very strikingly illustrated in the case of Ahab. When the last fatal denunciations were uttered by Elijah against him for his persisting in iniquity, the long-resisting king became unexpectedly penitent; then the threatened calamity was immediately postponed to a future generation of his descendants, who renewed the transgression in a more aggravated shape.*

LETTER XL.

The Divine Commands to the Jewish Nation as to their Poor.—Reasoned Principles on the production in Society of all its Necessaries.—The Divine Plan has been that every Producer is a Benefactor, and that all are conferring Benefits on each other.—It is the Duty and Interest of Society to provide the Mechanism and the Means, that all who are in want of Employment should be furnished with it.

My dear Sydney,

Among the moral precepts which the Deity expressed to the nation he had so specially formed, we find in those which he directed to regulate their conduct towards each other principles as peculiar and superior as those which he inculcated with regard to himself. Instead of confining them to the

cannot I do with you as this potter. Behold! as the clay in the potter's hands, so are ye in mine hand, O house of Israel!

"At what instant I shall speak concerning a nation and concerning a kingdom, to pluck up, and to pull down, and to destroy it, IF THAT NATION against whom I have pronounced TURN FROM THEIR EVIL, I will repent of the evil that I thought to do unto them. And at what instant I shall speak concerning a nation and concerning a kingdom, to build and to plant it; if it do evil in my sight that it obey not my voice, then I will repent of the good wherewith I said I would benefit them."—Jeremiah, c. xviii., v. 5–10.

* "And it came to pass, when Ahab heard those words, that he rent his clothes, and put sackcloth upon his flesh, and fasted, and lay in sackcloth, and went softly. And the Word of the Lord came unto Elijah the Tishbite, saying, Seest thou how Ahab humblest himself before me? BECAUSE he humbleth himself before me I will not bring the evil in his days: but in his son's days will I bring the evil upon his house."—1 Kings, c. xxi., v. 27–29.

mere rules of justice on which the ethical codes of antiquity were founded, he extended them to require kindness, affectionate feeling, and mutual aid; sympathy and benevolence in the mind, as well as in the actions of every one, towards those with whom he was living in neighbourhood, or in national society, or had any dealings or intercourse, or who should need his friendly services.

These feelings were solemnly enjoined by the Deity in his laws to the Jews in this emphatic command:—

"Thou shalt love thy neighbour as thyself: I am the Lord;"* implying, who require this of you. To this was added the injunction, that every seven years all creditors were to release their debtors of what they might owe them, and claim it no more;† and they were to do this act of generosity with a willing heart, and not to be severe as it approached.‡ If they did so, the Divine blessing was largely promised them.§ They were also at the same period to liberate their Hebrew bondservant, and to give him ample supplies on parting with him.‖ To the poor they were to be always liberal, and to regard them as brethren.

"If there be among you a poor man of one of thy brethren within any of thy gates in thy land which the Lord thy God giveth thee, thou shalt not harden thy heart nor shut thine hand from thy poor brother: but thou shalt open thine hand wide unto him, and shalt surely lend him sufficient for his need in that he wanteth.

"For the poor shall never cease out of the land: therefore I command thee, saying, Thou shalt open thine hand wide unto thy brother, to thy poor, and to thy needy in the land."¶

Such being the Divine instructions and injunctions on this

* Leviticus, c. xix., v. 18.

† Deuteronomy, c. xv., v. 1.

‡ "Beware that there be not a thought in thy wicked heart, saying, The seventh year, the year of release, is at hand; and thine eye be evil against thy poor brother, and thou givest him naught; and he cry unto the Lord against thee, and it be sin unto thee."—Deut., c. xv., v. 9.

§ "Thou shalt surely give him, and thine heart shalt not be grieved when thou givest unto him: because that for this thing the Lord shall bless thee in all thy works, and in all that thou puttest thine hand unto."—Ib., v. 10.

‖ Ib., v. 12. "And when thou sendest him out free from thee, thou shalt not let him go away empty. Thou shalt furnish him liberally out of thy flock, and out of thy floor, and out of thy wine-press: of that wherewith the Lord thy God hath blessed thee thou shalt give unto him."—Ib., v. 13.

¶ Deut., c. xv. v. 7, 8-11.

important subject, let us see how the impartial reasoning upon it, in its natural bearings and circumstances, will lead us to a coinciding acquiescence.

All who live on earth are fellow-creatures, originating alike from the same Creator, and possessed of one common nature, with the same system of being, qualities, and wants. All require to be sustained by food, and, in civilized life, need also raiment and habitation, and many necessaries and conveniences of family use for their daily comfort.

What we thus require arises from two different sources. One of these is the Deity, the other is our fellow-beings. The sustenance of mankind is the annual provision of the Supreme through his vegetable and animal kingdoms. But all the other necessaries and conveniences of life are made by human industry and ingenuity, in the various arts and manufactures of society. The materials of all are in created nature; but it is the hand of man which converts these into clothing, houses, and all the other means and implements of our domestic and social use. Every year the Divine system renews the needed food; and every day, in civilized nations, the population are employed in making what others will also want.

What human labour thus fabricates, each must make for himself, or obtain from those who can supply him with it.

The food which mankind require is produced upon the surface of the earth in proportion as it is cultivated.

The supply is scanty without culture, and would only suit a small population. Therefore, as the numbers multiply, more land must be tilled and more produce raised in proportion to their progressive augmentation. The harvests obtained by the skill and labour of the husbandman, originating from his personal exertions, can be justly claimed by no one from him without his consent. When all are cultivators, all can thus produce their own supplies.

But when nations become populous, it is found that a part of them only is necessary for that agricultural industry which will raise from the natural surface the sustenance which all require. The rest of society then apply their labour and ingenuity to make all the other necessaries and comforts which the whole population needs as well as their food.*

* Mr. Rickman thus states the result of his enumerations and classifications from the population returns:—

In this condition all nations are existing: one portion obtaining from the soil of the country the sustenance for all; the others making in the various arts and manufactures whatever else is wanted.

But as every one will need something that another makes, every one who is thus employed in supplying society with the fruit of his labour is doing daily good, and is really exercising a philanthropic employment.

Every artisan performs an act of benevolence in everything he frames. His own interest may be his impulse and object; but he is conferring benefit on some one by everything he produces. His workmanship will give comfort and pleasure to others, whether he means it or not.

If others did not make my shoes, and hat, and coat, and stockings, I must live in the pain or discomfort of being without them. I am therefore obliged by the poorest man, whose hands have formed what I derive such hourly advantage from.

No one will labour if what he makes by his thought and industry is to be taken from him. It therefore becomes, from the beginning, one of the earliest and most fixed laws of human society, that every one shall have an absolute property in the work of his hands, and therefore in all that he makes and obtains. The law of individual property is thus coeval with all civilized life. The savage plunders and is plundered. He therefore makes nothing beyond his most urgent wants, and for these as little as possible. Hence savage tribes have no property. Right of holding it without molestation from others, security in its use and possession, must therefore be

In England the families employed chiefly in agriculture are 761,348; those in trade, manufactures, and handicraft, 1,182,912; all other families, 801,076.

In Wales these respective classes are 73,195; 44,702; 48,641. In Scotland, 126,591; 207,259; 168,451; or, on the whole of Great Britain,

Agricultural	961,134
Trade and manufactures . .	1,434,873
Other families	1,018,168
	3,414,175 families

(*Rickman*, vol. ii., p. 1042.)

By the above we perceive that in Wales the families in husbandry were nearly double those in trade, &c. In Ireland the proportion of the agricultural is still greater; for there, out of a population of 1,385,066 *families*, 884,339 are employed in the production of food.—*Porter's "Progress of the Nation,"* p. 50.

established before mankind will make anything for the use of others, or anything comfortable for themselves.

Hence the welfare of all requires the full establishment of the right of individual property; the prohibition of all invasion of it; and the certainty of enjoying, using, and disposing of it solely as the holder pleases. Until this right be solidly fixed and universally upheld, man must live in destitution and discomfort.

But two results arise from this indispensable law. One, that every man must labour for what he wants; and the other, that he cannot have what he desires, however necessary for his existence, unless he earn it from those who possess it. For if he does not work for what he will need, some others must work for him while he is indolent, and no one is willing to do this. None will habitually work gratis for others. All work for each other, expecting a fair remuneration in some shape or other; but none without a return which he deems equivalent, or which is satisfactory to him. Every one retaining what he has, and not parting with any portion of it without an equitable consideration, each must find the means of obtaining what he needs from those who have it by giving to them what they also want: thus society subsists by its members exchanging labour and produce with each other.

One delivers an article of his property for something which is the property of the person who applies; and on this system of interchanging the fruit of each other's skill and industry all civilized society is everywhere subsisting and generally flourishing.

But as commodities can seldom be conveniently exchanged for commodities, and never in the small portions and on the series of occasions in which they are wanted, all nations use a medium or instrument of this barter; and this is money. The money of a country can be divided into small parts, as well as be put together into larger ones; and therefore it is a ready means of buying and selling at all times and in all degrees, and hence is used as the medium of our social traffic. The labourer takes money for his labour, because he knows that when he takes that to the shopkeeper, he will have for it the things he wants up to its value.

Hence every workman and trader seeks payment for his labour and produce in money, and by that acquires from others what *they have made* which he desires.

The system of Providence therefore is, that man shall employ himself in his social world in cultivating the soil to obtain its yearly harvests, and in making for himself out of the materials, mineral, vegetable, and animal, which are upon the earth, all the other necessaries he requires. These materials are always ready to be so used, and are abundant beyond the possibility of man's exhausting their natural store. These he can take up and work at whenever he pleases. It rests entirely with himself what he shall do with them, and how much he will fabricate or not. This rests, I say, with himself, as between man and his Creator; but beyond this it is an affair between each individual and his fellow-creatures. For here again the laws of property apply, and say, although there is this exuberance of the substances from which the necessaries of life are formed, yet, as in civilized life, every yard of ground, and all that is upon it, have become the appropriated possession of some one, none must take any part but as the owner gives or allows.

The same plan, therefore, prevails as to the supplies for all our wants. Man receives from God everything that is necessary in unfailing sufficiency, or, more generally, in superabundant quantity. But in civilized society, all that the Creator thus provides becomes the property of individuals as it arises, and has to be imparted by them to each other as they shall think proper.

Thus, as to our food, the Great Giver, after his yearly donation of it in the vegetable harvest, leaves it to the cultivators and owners of the soil to distribute between themselves and the rest of society. All that relates to it after its growth and full maturity belongs to man. It is committed then to the self-interest, the benevolence, the duty, and the necessities of those who receive it from the heavenly bounty. It is made essential to their self-interest and personal comfort that they should raise enough for others as well as for themselves. No society would allow them to hold it under any system of property if they did not. They are also, for their own sakes, obliged to let others have what they do not consume in their immediate families. What the most selfish motives thus compel, every benevolent feeling of man's nature makes pleasing to him; and it is moral duty thus to act towards the society *which permits* him to have the sure property in it, and *protects that right* to him. All who make the other conveniences

of life are under the same impulses and obligations. All have what others want, and must be supplied with from them.

It is the will and desire of the Creator, and the tendency of these sympathies, with which he has created the human soul, that all who have more than they need should distribute the surplus to the rest who have occasion for it. And as the moral and intellectual character of human nature improves, this will be its instinctive habit. No one will, in time, let another want what he can supply. It will be a part of his happiness to give as well as to receive. The distribution will then cause more pleasurable sensations to him than even the personal enjoyment. Many feel this already. So truly was it said by our Saviour, by him who made our frame, and who, by living in it during his human life on earth, knows how it feels in all its nobler emotions, "It is more blessed to give than to receive."* It is peculiarly important for every one to recollect this aphorism; for it was the Giver of all blessings who pronounced it, and therefore it presents to us one of the rules on which he bestows them.

But until human nature reaches this stage of its progression, the actuating cause which leads the possessors and makers of the necessaries of life to part with them to each other, is their own individual need of what others have. Each can get the supplies he wants only by giving to their owners equivalent portions of what he is holding.

He is, therefore, always offering these for sale to others, that, by the money which they produce, he may purchase from others what he has occasion for; and thus all that is yielded by nature or made by man is in constant application, distribution, and circulation through every class of society.

No system of human supply could have been planned on a more benevolent device: for it suggests and cherishes philanthropy between man and man in every part. It makes every one a benefactor to the other. It is a benefaction to me from the artisan or labourer who provides what I want, that he produces it for me; and from the tradesman who sells it to me, that he obtains it, and keeps it ready for me whenever I ap-

* It is St. Paul who has preserved to us this impressive observation of our Divine Instructer. At the end of his farewell address to his friends at Ephesus, he reminded them that he had taught them to support the weak, and to remember the words of the Lord Jesus, how he said, "It is more blessed to give than to receive."—Acts xx., v. 35.

ply for it. It is a benefaction from me to them that I buy it, and give for it that money which they can employ again in procuring fresh supplies for those who will need. Thus buyer and seller, producer and consumer, are equally benefactors to each other, and may increase their own happiness and each other's by so considering themselves.

Indeed, it is a moral defect in us not to keep such ideas in our mind, for by the omission we convict ourselves of perpetual ingratitude. I accuse myself of partaking too much of the fault I notice. My breakfast is very simple. One cup of tea, with sugar, but no milk, and merely dry bread, which I eat with it. Thus I require four things for my morning, as also for my evening meal.

The water is my Creator's supply, always at hand, but to how many persons am I indebted for my other three articles! The tea is a kind of inspiration to my mind, and a gentle excitation of happy spirits and comfortable feelings, and has been so all my life. Yet what a vast social machinery is necessary to be put in action! How many must work and labour in a thousand ways, and some endure much suffering and hardship, before I can enjoy either my single cup of tea or its sugar! Ships must be built by laborious shipwrights. Officers and seamen must be trained, and watch, and toil, and endure all the privations, and storms, and dangers of a distant voyage. Merchants must undertake and carry on the commercial enterprise which employs them. The Chinese farmers and their labourers must raise the tea-tree from the soil; and the West India planters and their operatives must tend the growing of the sugarcanes, and boil out and transmit the sugar. Dealers at home must then get them into their shops, so as to be ready when I need them. Thus, though I have only to send to a grocer's shop for them, yet they could not be there, nor come thence to me, without all this stupendous apparatus of working fellow-creatures, toiling in all their multifarious occupations.

The tea and sugar on my table represent all this series of human activity to me; and when I duly think of it, I ought to feel that I have congenial obligation to every one who has thus contributed to give me an enjoyment of high gratification twice every day. It is for them to feel congenially on their *parts to* those who employ them, and who, by purchasing what *they bring*, are also causes of pleasure and comfort to them.

And how greatly would our mutual philanthropy increase if we obeyed the dictates of our reason and better feelings, and regarded each other as the instruments of those reciprocated comforts which give life so much daily happiness. It is in these mutual benefactions that civilized society is most distinguished from the savage state. For in this man is his own provider only, and is destitute, wild, and miserable for being so.

Now, what is wanted in order to give these sensations to us all? Nothing but the recollection of such facts. If every workman would think that what he was doing was not mere sordid labour, for a selfish object, but that he was really making what would be serviceable to some of his fellow-creatures, and would give them comfort; and if he would accustom his mind to feel pleasure in the idea that he was thereby becoming one of the causes and creators of human happiness, and would pursue his work with a sentiment of desire to benefit, every article he made would be a benevolent fabrication, and the making of it with such feelings and for such a purpose a benevolent action. Such views and feelings turn every employment into a scene and school of virtue. Providence meant it to be so. And whoever works, sells, or buys with these ideas and feelings, will be cherishing virtuous emotions and leading a virtuous life, whatever be the occupation. We may thus moralize and dignify every path and exertion of human industry; and we shall make both our social and our individual life the happier if we do so.

Thus all the supplies of all our necessities arise from Divine benefaction and from human labour. All have the same wants and need the same sufficiencies for them. No man can make for himself all that he requires, and each, therefore, makes for others, and all become supplied by these reciprocal interchanges of articles and mediums with each other, every one benefiting others and benefited by them. Society rolls on through time with this circulation of mutual good, which only wants the inspiring spirit of mutual kindness and benevolence in the intention, desire, and execution, to make it everywhere virtuous and happy.

But from this point arises the great difficulty on this subject between man and man, under which the social world is everywhere existing, and which I feel myself incompetent to solve, and too ignorant of the facts and circumstances connected with it to write usefully and not erroneously upon it.

This difficulty is, that many are destitute of their daily subsistence and of the means of acquiring it, although plenty is existing in every society; and also, that those who, by their skill and labour, could add to the provision of the necessaries of life, find no means or channels by which they can make their willing industry serviceable to them, or no demand for what they do or supply. All towns, villages, and countries have a large portion of persons in this unprovided and destitute state, although there is always enough provided by Providence or fabricated by man for every existing individual's use and comfort.

Some plan should be devised to remedy this; but what that plan should be I am unable to suggest.

The usual remedies required by the suffering are agrarian laws, equalization of property, the abolition of all classes but the labouring one, and the diminution of their labour, and of the necessity for working. It has been fancied that the spoliation of the wealthier, and the destruction of all riches, and a community of property, would heal every evil and make every one happy; a great and infelicitating mistake—because, if acted upon, it would spread destruction around, and make misery or poverty the general lot. This would make the unprovided class so much more wretched, that most of them would be unable to survive.

These results I can foresee, but how to alleviate the evils is the important problem which statesmen and legislators have to solve. I am too inexperienced in the practical details of the national and local subjects which it involves to presume to decide what ought to be done. I can only, with real diffidence and with a desire to be enlightened by those who are better acquainted with them, make a few observations on the circumstances and principles which should be taken into consideration by all classes of the community.

It seems to be a reproach to a society to have within it any who are desirous to work, and by their honest industry to obtain their needful share of the subsistence and conveniences of life, and to have no employment to give them, that they may exercise their laudable wishes and useful activity.

It is an imputation on the intellect, as well as on the philanthropy of the society, that this is the case, because all their *comforts* arise from individual productivity and individual *labour*. Each of those wanting occupation can be a producer

of some of these utilities, or of others that will be serviceable if he were employed to do so.

Each can by his industry add to the property and enjoyments of his country, at the same time that he gains for himself the necessaries he requires. To let him be inactive and suffering by not putting his creative powers into use, is an injury to the state as well as to him; for if it be desirable to have more property, such persons are the instrument to make it. All further property of any kind must arise from further labour; and these unemployed persons offer the producing industry that will increase the stock of the general wealth and of individual convenience.

That society is in want of a vast deal more property is evident from the majority of its population having so little of it. Yet all those who are desirous of working, but who cannot get employment, are so many makers of what others want, who could be put into action to produce it.

It is therefore a vicious anomaly in our civil polity, that there are so many who want more property in order to be comfortable, and so many able and willing to labour to make it; and yet that these are not supplied with some employment that would alike benefit society and themselves, but are left to starve or suffer in useless inactivity and unwilling indolence.

What will remove such a disgraceful anomaly? Who is in fault? Is there a want of benevolence or of intellect in the society, that so many capable instruments of beneficial productions are left in this unused and paralyzed state, merely because society has not provided the due plans and means to avail itself of their good wishes and industrious capacities? No; our nation abounds with talent and philanthropy, but it has not directed its thoughts and feelings sufficiently to this momentous theme. It has not yet done what is obviously the thing wanted. It has not yet devised an operative system of finding and giving useful employment to those who cannot get it for themselves. It has not established wise plans for setting the unemployed to be the makers of what others want, or for distributing to those what they cannot make or procure for themselves. For any to have more property or conveniences, more labour is required; it is therefore essential to social welfare that, when so many offer more labour which would be productive of more commodities, means should be

in existence at all times to employ the willing industry in augmenting the public happiness.

How this desirable object can be practically effected I am unable to state.

But some parochial or municipal mechanism is wanted for this purpose; some always open and approachable medium by which those wanting employment may, without depreciation, discredit, or displeasure, find the work provided for them, or recommendations or introductions to it, by which they may support themselves as long as they need, and lessen the poverty in society by increasing its articles of property and convenience.

Whether public boards or private associations in towns or parishes could best do this, I cannot say. But as large communications and intercourse between different places would be necessary, perhaps some general system, with local ramifications, would be most availing. From the labours of such men, the cottages of the poor might, by wise and kind distributions of the produce, be supplied with many family conveniences that would diffuse great delight and much improvement too. The poor cannot buy many things they need. How patriotic it would be to use the surplus labour which is everywhere asking for employment, in making in every parish what so many are needing, and could thus so easily be supplied with! But I can only express wishes and speculations; I am incompetent to devise the proper institutions that would be at the same time unobjectionable and efficient; but there are many able men who can supply my deficiency. I can only send you these general suggestions.

I will merely add, that as it is more labour which can alone remove the poverty that exists, it is a mistake to imagine that the general labour of society can be ever lessened, or that its diminution would increase human happiness; nor is it wise to cherish any prejudice against it. Nothing but the invention of machinery, as effective to make what it accomplishes, can supersede it. The less labour there is in a society, the less supply there must be, and, of course, the less comfort, from the absence of the supply which is abstracted by the absence of the industry that provided it. All that mankind enjoy arises from their respective labours. Some individuals may be, and *are so* circumstanced as to have a burdensome proportion. *This requires* some scheme of a better division and distribu-

tion of the industry required, but no diminution of it, unless human art can make wood and metals, steam or stones perform what is now effected by human activity and strength. The less agricultural labour without this substitute, the less food must be had, and so of every article which our artisans provide. To lessen labour would be to make poverty more poor and more universal.

It would also lessen all that happiness which arises from occupation which is not pernicious to others, or individually prejudicial; for without continual employment man would be and is a dissatisfied, unhappy, and wrongly-acting being. But the laborious occupations of society certainly need benevolent and legislative revision and regulations. The factory system contains evils which disgrace the owners who continue them and the nation whose legislature allows their duration. All such things should be remedied; the poor should be guided, taught, counselled, and assisted, but never persecuted, harshly treated, oppressed, or neglected. National prosperity will increase as they are more kindly attended to.

LETTER XLI.

The Jewish Nation raised up for two main Purposes, which their History has accomplished.—The Elevation of it to be the Sovereign Empire of the World prevented by Solomon, Jeroboam, and the People establishing Paganism among them.—Their Division into two Kingdoms.—The predicted and executed Downfall of these People for persisting in their transgressions.

My dear Son,

The Deity appears to have raised up his Jewish nation for two great purposes, besides the collateral ones which were also promoted by it. One of these was to enable him to display himself to mankind as he wished to be known by them, and therefore to make his omnipotent infinity appear to them in these interesting and comprehensible qualities and features with which they would be most concerned, and thus to be in their conceptions, from sensorial and actual knowledge, that moral and *intellectual* personality to which human nature was

meant to be assimilated, as far as created being could resemble such a wonderful and all-perfect Creator. The Divine conduct in all things exhibits principles of action which we are to imitate, as far as they apply in our human life and dealings. He manifested himself at various times, in order to produce on the Jewish mind, and, through that, on all others, those impressions and effects which would be most promotive of their right, moral, and intellectual formation.

To this end even their perversities were made conducive as well as their obedience. For whatever they did gave their Divine Sovereign an opportunity of shaping and advancing his tuition accordingly. His blessings and his corrections alike educated and instructed them. The one admonished them what they were to avoid, the other what he approved and rewarded. By all he disclosed the feelings, views, expectations, determinations, and principles which he entertained as to human nature, and on which he had created it. In his dealings with them he taught both them and us, by action as well as by precept; and by causing what he did and said to be faithfully recorded, in its principal and sufficient outlines, in written language, he has made his lessons and manifestations to them the common property of all his human world, who can read the transmitted and preserved narrations, or hear what they contain. By this means all that was done or inculcated by him in Egypt, on Mount Sinai, in the Wilderness, in Judea and elsewhere, has been said and done for us as much as for them, and has been, ever since these sacred writings have been known and studied by other nations, enlightening and guiding all the populations of the world. From our Saviour's time more especially to this moment, they have been forming and enriching the intellect of human nature, in all its national sections, with a knowledge of Divine truths, with an excitation of Divine feelings, and with a perpetual melioration of character.

The mental and moral results of these Divine means and agencies we are now inheriting. They have raised human beings now to an elevated superiority above all the ancient generations, and will be still working their improving and illuminating effects, with increased power and fertility, in every new generation that will arise. This part of the Divine process, *in the formation* of his Jewish nation, and in the addition to *that of his grand* Christian Revelation, has been fully answered

—Divinely efficient. The present state of the world is the visible evidence of its successful and magnificent operation. Human nature never has been so great and rich in all the qualities that adorn it as it is at the present moment, notwithstanding the vices and errors which yet deform society, and so often sadden individual life.

The other great purpose was to make it instrumental to the improvement of all the rest of mankind, and to the disclosure of the Divine government of all nations on the earth; and to prepare, by what was done in it and with it, for the introduction of his great Christian system, which was to be his next grand process, for the benefit and formation of all his human world. It is to this second purpose of his Divine plan in the Jewish nation that I will now direct your further attention.

It seems to have been the intention of the Almighty, if the Jewish people would have steadily acted on the laws and principles which he had taught them, to conduct and aggrandize them to be the sovereign nation of the earth, ruling all, and the pattern of moral, religious, and intellectual excellence and progression, for all to see and imitate.

The Mosaic language leads us to this inference.* Such splendid intimations are several times repeated,† and would have been accomplished if this people, by training themselves according to his instructions, had made themselves fit to be such a predominating nation. But they soon fell into that extraordinary infatuation of the ancient world which we have before considered. The next generation after Joshua forgot

* "If thou carefully hearken unto the voice of the Lord thy God to observe to do all these commandments which I command thee this day, thou shalt reign over many nations, but they shall not reign over thee." —Deut., c. xv., v. 5, 6.

"All the people of the earth shall see that thou art called by the name of the Lord, and they shall be afraid of thee. And the Lord shall make thee the head and not the tail; and thou shalt be above only, and thou shalt not be beneath."—Ib., c. xxviii., v. 10–13.

† As, "For if ye shall diligently keep all these commandments, to do them, to love the Lord your God, to walk in all his ways, and to cleave unto him, THEN will the Lord drive out all these nations from before you; and ye shall possess greater nations and mightier than yourselves. *Every place* whereon the soles of your feet shall tread shall be yours: from the wilderness and Lebanon; from the river, the river Euphrates, *even unto the uttermost sea*, shall your coast be.

"*There shall no man be able to stand before you:* for the Lord your God shall lay the fear of you and the dread of you upon all the land that ye shall tread upon, as he hath said unto you."—Ib., c. xi., v. 22–25.

their Divine benefactor, and adopted the paganism of the nations around them.* This compelled him to afflict them by giving victory over them to those they were perversely imitating, in order to recover them from the folly. But their repentance was soon succeeded by relapses, and this alternation of right and wrong conduct continued, till at last they threw off the immediate government of their Sacred Legislator, and insisted upon having one of themselves made their visible and ruling king. Saul was chosen to this dignity, but was so little faithful and obedient that his dynasty was put aside, and a new one, in the young shepherd David, was raised to the Jewish throne in his stead.

David became, in mind and feeling towards God, all that he was required to be: but the corruptions of great prosperity undermined his moral resolution, and in an evil hour he committed a crime, by the indulgence of his sensual passions, which could not but have the most injurious effects, by its bad sanction and example, on all his people. He repented with bitter self-remorse; but he had done the moral mischief to his nation, and, though pardoned, was doomed to an afflicted life, on account of the pernicious consequences of his conduct, that the world might see and know that piety without virtue is an incongruity, to which suffering and chastisement are attached in the providential administration of human life.

In Solomon there appeared a prospect of a sovereign who would enlighten and moralize his country, and prepare it for expanding into the greatness of its promised destinies. Choosing in his youth moral wisdom as his self-chosen good, he was blessed with every temporal benefit and greatness: but his worldly happiness became his ruin. He resolved to enjoy bodily pleasures in all their forms, and he felt the effects of such unrestricted enjoyments.† They weakened his mind

* Judges, c. ii., v. 10–33.

† "I said in mine heart, Go to, now, I will prove thee with mirth; therefore enjoy pleasure. I sought in mine heart to give myself to wine, and to lay hold on folly till I might see what was good for the sons of men. I gat me men-singers and women-singers, and the delights of the sons of men: musical instruments, and that of all sorts; and whatsoever mine eyes desired I kept not from them. I withheld not my heart from any joy. I turned myself to behold wisdom, and madness, and folly."—Eccles., c. ii., v. 1–12.

The issue of his experience was, that it was all vanity and vexation of *spirit*, and no profit to him, v. 11. But it incurably contaminated his *nation, and* debilitated himself, and nullified all the benefit of his *preceding wisdom.*

and debased his moral principle, and he laid the foundations of the ruin of his nation, and intercepted all its farther progress, by allowing his favourite women to seduce him to establish that paganism which his people had been specially raised and miraculously aggrandized in order to subvert and extinguish.* From that time the sun of Israel began to set; the kingdom was divided into two parts by the Divine interference.†

This depravation of mind and conduct increased upon them in every succeeding reign. They became useless in their intended instrumentality of enlightening and governing the world, and preparations were then made, on this continued defection, for the destructive fulfilment on them of all the denunciations which had been predicted on such misconduct, and for the succeeding operations on other nations, which would, by other means, produce the improvement and promote the progression of human nature.

The Divine wisdom proceeded gradually in its operations to abase and remove the offending nation, and to produce its downfall by such successive events as would most benefit the rest of mankind. He raised up a new Syrian kingdom on their northwestern frontier at Damascus, to prevent their farther conquests, and to be an instrument of discipline upon them.‡ He caused Jeroboam, one of Solomon's bravest officers, to be anointed by a prophet to separate ten of the tribes from the rest, and to form of them a new kingdom, apart from the two others, which Solomon's son and successors would govern. Thus the Jewish nation was broken into two kingdoms on account of their adopted idolatry.§ These

* "Solomon went after Ashtoreth, the goddess of the Zidonians, and after Milcom (Molech), the abomination of the Ammonites. And Solomon did evil in the sight of the Lord, and went not fully after the Lord, as did David his father. Then did Solomon build a high place for Chemosh, the abomination of Moab, in the hill that is before Jerusalem, and for Molech; and likewise did he for all his strange wives which burnt incense and sacrificed unto their gods."—1 Kings, c. xi., v. 5-8.

† "Wherefore the Lord said unto Solomon, Forasmuch as this is done of thee, I will surely rend thy kingdom from thee, and will give it unto thy servant. I will rend it out of the hand of thy son, but will give one tribe to thy son for my servant David's sake."—Ib., v. 11-13.

‡ "And God stirred him up another adversary, Rezon, who fled from his lord, Hadadezer, king of Zobah. He gathered men unto him, and became captain over a band; and they went to Damascus, and dwelt there, and reigned in Damascus. He abhorred Israel, and reigned over Syria."—Ib., v. 23-25.

§ "And he said to Jeroboam, Thus saith the Lord the God of Israel,

becoming jealous of each other and mutually hostile, precluded all further aggrandizement of their dominion.

The fears and cowardice of ambition, and love of power, induced Jeroboam to set up a new idolatry in his new kingdom, to prevent the people from attending three times a year at Jerusalem, at the great annual sacrifices appointed by Moses to be celebrated there in a national congregation.* Paganism became then the habitual religion of the country, with a successive addition of the most offensive forms and ceremonies. The Deity, by his prophets, by affliction, and by repeated changes of dynasties as each transgressed, endeavoured to recall them to the paths of reason and duty.† But no discipline or exhortations availed; and therefore he prepared the means and instruments for their overthrow, after an admonitory struggle of two centuries and a half. The nation appointed to subvert them was the kingdom of Assyria, on their northeastern frontier. In the 254th year after Solomon's death, Shalmaneser, after a siege of three years, took their capital, Samaria, and carried all the population away into his own dominions.‡

The division which forms the smaller kingdom of Judah was not for some time so totally perverted, and had occasionally some kings of ability and true piety. Hezekiah and Josiah were the most distinguished of these. But at length they became irrecoverably immersed in the same pernicious delusion which had destroyed their severed sister nation. They survived her fall 133 years, and were then, after all the prophets had failed to reclaim them, overwhelmed by the new conqueror of Asia, specially raised up to found a new empire—

Behold, I will rend the kingdom, and give ten tribes to thee: BECAUSE that THEY have forsaken me, and have worshipped Ashtoreth, Chemosh, and Milcom, and have not walked in my ways."—1 Kings, c. xi., v. 31–33.

* Ib., c. xii., v. 26–33.

† Elijah and Elisha were the prophets who were commissioned to display the reality of the Deity they had abandoned, by miracles which proved his power and agency in opposition to their powerless idols; but the contrast did not overcome the attractive infatuation which misled them.

‡ 2 Kings, c. xvii., v. 3–6. "And carried Israel away into Assyria, and placed them in Halah, and in Habor, by the river Gozan, and in the cities of the Medes."—Ib., v. 6.

From this time we hear no more of these ten tribes, nor is it known whether any of their descendants are in the world at present, though it *is thought* by many that there is a remnant in some region yet unvisited. *Solomon died* 975 years before the Christian era. Israel fell in the 721st.

Nebuchadnezzar—the King of Babylon, whom the history of Daniel has so interestingly delineated to us. Jeremiah forewarned them of the certainty of this visitation in this admonitory prophecy.

"Then came the word of the Lord unto Jeremiah, saying,
"Behold! I am the Lord: the God of all flesh. Is there anything too hard for me?
"Therefore thus saith the Lord. I will give this city into the hand of the Chaldeans, and into the hands of Nebuchadnezzar, king of Babylon, and he shall take it; and the Chaldeans that fight against this city shall come and set fire on this city, and burn it with the houses, upon whose roofs they have offered incense unto Baal, and poured out drink-offerings to other gods, to provoke me to anger. And they built the high places of Baal, which are in the valley of the son of Hinnom, to cause their sons and daughters to pass through fire to Molech."*

The first Babylonian army sent retiring on the approach of an auxiliary force from Egypt, the Jews thought they were safe; on this mistake Jeremiah was directed to exhort them not to be misled by the temporary deliverance.

"Thus shall ye say to the king of Judah: Pharaoh's army, which is come forth to help you, shall return to Egypt into their own land. The Chaldeans shall come again, and fight against this city, and take it, and burn it with fire." This was reasserted with a peculiar emphasis: "Thus saith the Lord, Deceive not yourselves, saying, The Chaldeans shall surely depart from us: for they shall not depart. For though ye had smitten the whole army of the Chaldeans that fight against you, and there remained but wounded men among them, yet they should rise up every man in his tent and burn this city with fire."†

The Babylonian conqueror, on his first invasion, deposed the Jewish king, and placed one of his sons, Zedekiah, on the throne in his stead, to be subordinate to himself. But when this prince, trusting to the Egyptian succours, had revolted from him, Nebuchadnezzar came with that vindictive army which, after two years' siege, took the strongly-fortified Jerusalem, and burnt it to the ground, with the magnificent temple which Solomon had so sumptuously erected.

This catastrophe is thus described to us:—

Their last king, Zedekiah, "was one-and-twenty years old when he began to reign, and reigned eleven years in Jerusalem.
"And he did that which was evil in the sight of the Lord his God, and humbled not himself before Jeremiah the prophet, speaking from the mouth of the Lord: but he stiffened his neck and hardened his heart from turning to the Lord God of Israel. Moreover, all the chief of the priests and the people transgressed very much after all the abominations of the

* *Jeremiah, c.* xxxii., v. 26–9, 35. † Ib., c. xxxvii., v. 7–10.

heathen, and polluted the house of the Lord which he had hallowed in Jerusalem.

"And the Lord God of their fathers sent to them by his messengers, rising up betimes and sending, *because he had compassion on his people* and on his dwelling-place.

"But they mocked the messengers of God, and despised his words, and misused his prophets, until the wrath of the Lord arose against his people, till there was no remedy.

"Therefore he brought upon them the King of the Chaldees, WHO slew their young men with the sword in the house of their sanctuary, and had no compassion upon young man or maiden, or him that stooped for age. Into his hand he gave them all.

"And all the vessels of the house of God, great and small, and the treasures of the house of the Lord, and the treasures of the king and of his princes, they brought to Babylon. And they burnt the house of God, and brake down the wall of Jerusalem, and burnt all the palaces thereof with fire, and destroyed all the goodly vessels thereof; and them that escaped from the sword carried he away to Babylon, where they were servants to him and his sons until the reign of the kingdom of Persia.

"To FULFIL the word of the Lord by the mouth of Jeremiah, until the land had enjoyed her Sabbaths: for as long as she lay desolate, she kept Sabbath to fulfil threescore and ten years.'"*

This captivity Jeremiah had predicted to be appointed to last for seventy years.† To this period it was limited; and the celebrated Cyrus was the sovereign designated by Isaiah, one hundred and twenty years before the destruction, as the person named and chosen, and who would be raised up and supported by the Divine agency, to overthrow the Babylonish empire, and to release them from their captivity, and permit and assist them to rebuild their metropolis. Such predictions are demonstrations of the reality, and of the operation of Divine agency on the human minds which utter them, and in the national movements which accomplish them, and in the results and revolutions which they produce.‡

* 2 Chron., c. xxxvi., v. 11–21.

† Jeremiah, c. xxv., v. 12, and c. xxix., v. 10.

‡ The prophecy of Isaiah on this subject is a stream of sublime eloquence, as it is of a supernatural inspiration: for no human mind could of itself have formed such an exact and particularizing foresight.

"Thus saith the Lord thy Redeemer,
and he that formed thee from the womb,
I AM THE LORD THAT MAKETH ALL THINGS;
That stretcheth forth the heavens alone;
That spreadeth abroad the earth by myself;
That frustrateth the tokens of the seers,
and maketh diviners mad;
That turneth wise men backward,
and maketh their knowledge foolish;
That confirmeth the word of his servant,
and performeth the counsel of his messengers;

LETTER XLII.

The History of the Jews presents a series of the Supernatural Agency of Providence on their Nation and on the Kingdoms of the Earth.—Of two sorts, Sensorial and Intellectual.—The latter displayed in its Operations in the Rise and Fall of Nations, and in the Prophecies concerning them.—Review of these.—Conclusion of the Work.

MY DEAR SON,

The history of the Jews, from the death of Solomon to the Babylonian captivity, is, in almost every succeeding reign, a history of the supernatural agency of the Providential ruler of the earth, made perceptible to the mind and senses of those to whom it was addressed. The interferences were directed, in the most gracious manner, for their benefit and improvement in the immediate effects; but as the omniscient foresight of their deserted Benefactor anticipated their determined averseness to his guidance, they were successively performed for the instruction and advantage of all other nations and ages to which they should become known.

> That saith to Jerusalem
> 'Thou shalt be inhabited,'
> And to the cities of Judah
> 'Ye shall be built,
> And I will raise up the decayed places thereof;'
> That saith to the deep 'Be dry,
> and I will dry up the rivers;'
> That saith of CYRUS
> 'He is my Shepherd,
> And shall perform all my pleasure:
> Even saying to Jerusalem
> Thou shalt be built;
> and to the Temple
> Thy foundation shall be laid.'"
>
> Isaiah, c. xliv., v. 24–8.

This comforting promise of deliverance to his people from their captivity was introduced by this beautiful effusion:—

> "Sing, O ye heavens!
> For the Lord hath done it.
> Shout, ye lower parts of the earth!
> Break forth into singing, ye mountains!
> O forest and every tree therein,
> For the Lord hath redeemed Jacob,
> And *glorified* himself in Israel."
>
> Id., v. 23.

They present to us so much of the history of his moral government as it is important for all mankind to be acquainted with: and this became more useful to all by the principles on which it is conducted, and the ends it has in view, being illustrated by clear statements of the causes which occasioned the interpositions, and of the purposes which they acted to effectuate.

They were of two sorts, sensorial and intellectual. The sensorial were the miraculous or supernatural incidents which Elijah, Elisha, and some others were authorized to pray for, to order, or to occasion. The withering of Jeroboam's arm and its restoration;* the fracture of his idolatrous altar;† the destruction of the prophet by the lion, for his disobedience to the command he had received;‡ the appointed famine, and the feeding of Elijah in the desert;§ the daily supply of the Sidonian widow's flour and oil, and the revival of her son;‖ the fire from the skies to kindle his sacrifice in his contest with the priests of Baal, one of the finest narratives in the Old Testament;¶ the storm of rain, which ended the chastising drought;** the Divine appearance to the prophet at Horeb, commanding him to anoint Hazael to be King of Syria, and Jehu to found a new dynasty in Israel, both meant to be and used as human instruments to execute the Divine plans at that time directed against this wilfully offending people;†† the lightning which descended on those who came to apprehend him,‡‡ and his final ascent from the earth in a whirlwind of electrical fire;§§ these, and the supernatural events which followed the bidding of Elisha, his ordained successor, were so many admonishing proofs at that time to the whole nation of the certain existence, superintendence, and operation in human affairs of the God they were so contumaciously deserting, adapted to recall them from their errors and folly. But it was one of the delusions of the pagan system to admit and believe the power and agency of other gods, without therefore

* 1 Kings, c. xiv., v. 4, 6.
† Ib., v. 3, 5.
‡ Ib., v. 20–26.
§ Ib., c. xvii., v. 1–7.
‖ Ib., v. 9–24.
¶ Ib., c. xviii., v. 17–40.
** Ib., v. 41–45.
†† Ib., c. xix., v. 1–17. The nation had become so universally devoted to their paganism, that out of all their number, in this division of it, apparently between two and three millions, only seven thousand were adhering to their real God.—Ib. v. 18.
‡‡ 2 Kings, c. i., v. 2–17.
§§ Ib., c. ii., v. 11.

discrediting their own superstitions. Hence these manifestations of actual omnipotence did not induce them to forsake what they preferred. Their inclinations were with their own practices, and against the sacred morality and appointed worship of the true Jehovah. They seem not to have disputed so much his existence and potentiality as to have insisted on an intercommunity between him and the idols and chimeras which they were worshipping.

The prophets repeatedly allude to this desecrating union, which nullified all the Divine purposes in their elevation and tuition.

The intellectual department of the supernatural agency, which distinguished most prominently the latter part of the period between Solomon and Zedekiah, consisted of a series of prophetic enunciations of what the Deity intended to do, at the subsequent times which he marked, in and to the various nations of the earth, as well as in the two kingdoms of Israel and Judah.

This is that branch of the Divine agency with which we are now most interested, and which has the form and effect of a perpetual miracle to us; always appealing to our understanding, and claiming from every rightly-acting judgment a conviction of the real existence and agency of that Omniscient mind and Almighty power which alone could have planned, revealed, and produced what it inspired its ancient prophets to foretell. Many anticipations of the future are but argument, inference, and conjecture, and prove their human origin and their fallacy in their continual failures and falsehood. But all the Divine predictions have been faithfully fulfilled in the events they designated to occur, which relate to times anterior to us. Those which belong to our period are now in visible and correct fulfilment; and these facts leave no doubt on the impartially-reflecting mind, that what are specified as relating to periods posterior to our own, will be accomplished with equal accuracy and certitude.

Another grand species of this intellectual Divine agency appears to us in its special production of the nations that become distinguished in the human world; in its directing their movements; using them as its instruments, and causing their vicissitudes, revolutions, and downfall, according to the arrangements and objects of its preceding plan, and according as *such results most* efficiently contribute to bring about the

future events, and the successive states of human society, and the progression of human nature, which the Divine wisdom has resolved to occasion in that series which will at last effectuate the whole of his grand scheme for the consummated formation of his human order of beings. To plan such designs evinces the extensiveness and providential intelligence of his intellectual nature. To foretell what he purposes thus to accomplish, announces both his omniscience of the future and absolute command of it. To cause the events thus intended and designated to occur, in their due order and appointed times, proves his omnipotent sovereignty and superiority over all other existence, and also that whatever is in being, whether material or spiritual, is subject to his government, and moves and acts as he influences and directs.

The prophecies in his Hebrew Scriptures, and the history of all the nations of the earth, if sufficiently studied in careful comparison with these, are the materials and the expounders of this Divine knowledge to us.

His superintendence and operations on all the other nations of the world were carried on imperceptibly to mortal sense, while he was rearing and enlarging his selected nation. Nor did he avowedly interfere with them, except to emancipate his people from their Egyptian slavery, until the reign of Solomon evinced the impossibility of making a Jewish empire, with that moral and intellectual advantage to the human world which, if its population had been steadily attached and obedient to him, would have resulted from their universal sway. In that case all mankind would have been under his immediate government by their political instrumentality, and that which is yet to be in some following age would then have been realized to the ennobling and felicity of all.*

* The state of the earth that is yet to occur is thus depictured by Isaiah:—"And it shall come to pass in the last days, that the mountain of the Lord's House shall be established on the top of the mountains, and shall be exalted above the hills, and ALL NATIONS shall flow unto it.

"And many people shall go and say, Come ye, and let us go up to the mountain of the Lord; to the house of the God of Jacob: and he will teach us of his ways, and we will walk in his paths.

"For out of Zion shall go forth the law, and the word of the Lord from Jerusalem."—Isaiah, c. ii., v. 2, 3.

Micah uttered one nearly similar, c. iv., v. 1. The revelation and *diffusion of* Christianity began the fulfilment of these predictions, but *they seem to point* to a full and literal accomplishment, by the establishment *of a divinely-raised empire*, of which Jerusalem will be the chief *city*.

When their defection became universal, and their removal was determined on, by their becoming not only useless, but injurious to mankind, the Deity then began to avow and demonstrate his agency and government in the other populations at that time in the world.

His first act of this sort was to raise up the Syrian kingdom already mentioned. His next greatest operation was to elevate the ASSYRIAN nation to sufficient power, and to use that as his instrument to chastise and subvert the most populous portion of the Jewish people—of which Jeroboam, by his enjoined revolt, had founded the separate kingdom of Israel—and also to overthrow several of the minor states in those regions, with their local and offensive superstitions.

That Assyria was specially reared and aided by the Divine power to become for the time this predominating kingdom, and to do what it accomplished, we learn from the repeated predictions of its operations by the sublime Isaiah.

He announced its triumphs, its effects, and likewise its appointed downfall, when it had accomplished all that it was to perform. His tenth chapter is an express exposition of the Divine principle and intentions with respect to it, and of its ordained instrumentality.

> "O Assyria! the rod of mine anger.
> THE STAFF in their hand is MINE INDIGNATION.
> I WILL SEND HIM
> against a hypocritical nation;
> and against the people of my wrath
> WILL I GIVE HIM A CHARGE;
> To take the spoil and to take the prey,
> and to tread them down like the mire of the streets."*

There was no public declaration to Assyria that it was only acting as an instrument of the Divine counsels. The supernatural influence on the minds of its leaders was so imperceptible to them, that it was not distinguished by them from their own thoughts and feelings. Hence they had no notion that they were employed but as agents to execute a superior plan. They considered themselves to be following only their own policy and views by their conquests. This is thus intimated:—

> "However he meaneth not so:
> Neither doth his heart think so.

* Isaiah, c. x., v. 5, 6.

But it is in his heart to destroy
And to cut off nations not a few.
For he saith,
'Are not my princes altogether kings?
Is not Calno as Carchemish?
Is not Hamath as Arphad?
Is not Samaria as Damascus?
As my hand hath found the kingdoms of the idols,
whose graven images did excel those
of Jerusalem and Samaria,
Shall I not, as I have done
unto Samaria and her idols,
so do to Jerusalem and her idols?' "*

The prophet therefore announced, that as soon as the instr mentality of the Assyrians had been used against the Jew their kingdom should be thrown down, having only had t triumph in order to be such an instrument.

"Wherefore it shall come to pass, that when the Lord hath perform his whole work upon Mount Zion and on Jerusalem, I will punish t fruit of the stout heart of the king of Assyria, and the glory of his hi looks.

"For he saith, By the strength of my hand I have done it; and by t wisdom, for I am prudent.

"Shall the axe boast itself against him that heweth therewith? shall the saw magnify itself against him that shaketh it?

"Therefore shall the Lord, the Lord of Hosts, send among his fat on leanness; and under his glory he shall kindle a burning, like the burni of a fire."†

Assyria was used for two other important objects besid the subversion of the kingdom of Israel. One of these was t abolition of that Syrian kingdom which had been specia raised up as a means of chastising discipline to the Jew Amos, many years before, had predicted its overthrow.‡ T King of Assyria, in the reign of Ahaz, attacked it, took D mascus, slew its last king, Rezin, and carried away the peo into captivity, as declared. He made this invasion to preser Ahaz from their endangering hostilities.§ In this event important prophecy of Isaiah was fulfilled.‖

The other use made of Assyria was to destroy several the paganisms and little idolatrous kingdoms in Syria and vicinity. The Assyrian monarch, Sennacherib, boasted th his predecessors and himself had made these conquests.

* *Isaiah*, c. x., v. 7–11.
† Ib., v. 12–16.
‡ *Amos*, c. i., v. 3–5.
§ 2 Kings, c. xvi., v. 5–
‖ *Isaiah*, c. vii., v. 1–9, 16, and c. viii., v. 4, 7.

"He sent messengers to Hezekiah, saying,
"Let not thy God, in whom thou trusteth, deceive thee, saying, Jerusalem shall not be given into the hand of the King of Assyria. Behold! thou hast heard what the kings of Assyria have done to all lands, by destroying them utterly; and shalt thou be delivered?
"HAVE THE GODS of the nations delivered them which my fathers have destroyed? Gozan, and Hazan, and Kezeph, and the children of Eden, which were in Telassar? Where is the King of Hamath, and the King of Arphad, and the King of the city of Sepharvaim, Hena, and Ivah?"*

Hezekiah alluded to the same fact in his supplication to God, when he went to the Temple with Sennacherib's insulting letter, and spread it on the altar with this prayer:—

"O Lord of Hosts! God of Israel! that dwellest between the cherubim! Thou art the God, even thou alone, of all the kingdoms of the earth! Thou hast made heaven and earth. Hear the words of Sennacherib, which has sent to reproach the living God!
"Of a truth, Lord! the kings of Assyria have laid waste all the nations, and their countries; *and have cast their gods into the fire;* for they were no gods, but the work of men's hands; wood and stone. Therefore *they have destroyed them.*"†

Thus the Assyrian empire cleared this part of Asia of their ancient superstitions, and of these minor kingdoms, and established its own more improved system instead.

It was probably the chief object of Jonah's mission to Nineveh, in the preceding century, to produce that improvement in them which would fit their descendants to be thus made use of. The result of his visit was a great national amendment.‡

The next great kingdom specially raised up by the Deity, and declared by him to be so, was the sudden and short, but brilliant and, for a time, all-subduing BABYLONIAN monarchy. This, like Napoleon's empire, seems to have been created by the military genius, activity, and resolution of one man, actuated by the Divine impulses to the various enterprises he pursued and accomplished. This was Nebuchadnezzar, or, as Strabo names him, Nebuchodonosor; and the ends he effected were the conquest of Assyria; afterward of Egypt, and likewise of the Phœnicians, in addition to his demolition of the kingdom and temple of Judah.

Jeremiah was the prophet instructed to announce his successes. After a series of exhortations, peculiarly eloquent

* Isaiah, c. xxxvii., v. 9–13. † Ib., v. 15–19.
‡ Jonah, c. iii., v. 10.

and pathetic, to the king, chiefs, and people of Jerusalem and Judah, to relinquish their idolatry and vices, he declared that, if they continued in their alienation, they would be conquered by the king of Babylon, and their city taken and destroyed, and that Nebuchadnezzar, whose name he sometimes pronounces Nebuchadrezzar, was the person destined to execute this sentence against them.*

He repeated this, with the addition that this monarch would be also commissioned to act as victoriously against all the kingdoms around them :—

"Behold! I will send and take all the families of the North, saith the Lord, and Nebuchadrezzar, the king of Babylon, MY SERVANT, and will bring him against this land, and against all these nations round about."†

"I have made the earth; the man and the beast that are upon the ground, by my great power and by my outstretched arm; and have given it unto whom it seemed meet unto me. And now I have given all these lands into the hands of Nebuchadnezzar, the king of Babylon, MY SERVANT, and all nations shall serve him, and *his son, and his son's son*, until the very time of his land come: and then many nations and great kings shall serve themselves of him."‡

The same prophet also announced that this new conqueror was appointed to invade Egypt, to subdue it, and to destroy their pagan temples and images. This was the first time that this ancient and powerful people had been subjected to any Asiatic or northern empire. But the period of its greatness was now ordained to end, and Nebuchadnezzar was the sovereign decreed to inflict the humiliation. Jeremiah was ordered to lay some stones under the earth in the front of one of the Pharaoh's palaces, as the foundation of the stranger's regal seat of triumph, and was directed to predict,

"Thus saith the Lord God of Hosts, the God of Israel; Behold! I will send and take Nebuchadrezzar, MY SERVANT, and set his throne upon these stones that I have hid; and he shall spread his royal pavilion over them. And when he cometh he shall smite the land of Egypt; and deliver such as are for death to death; and such as are for captivity to captivity; and I will kindle a fire in the houses of the gods of Egypt, and he shall burn them and carry them away captives. And he shall array himself with the land of Egypt as a shepherd putteth on his garment; and he shall go forth from thence in peace."§

"I will give Pharaoh Hophra, king of Egypt, into the hand of his enemies, and into the hand of them that seek his life."‖

* Jeremiah, c. xx., v. 4; c. xxi., v. 7; c. xxxiv., v. 2.
† *Ib.*, c. xxv., v. 9. ‡ Ib., c. xxvii., v. 5-7.
§ *Ib.*, c. xliii., v. 10-12.
‖ *Ib.*, c. xliv., v. 30. Another prophecy highly animated, on the same

He was also to conquer in Arabia and Syria.* But one of his greatest exploits was his invasion of Phœnicia, and his conquest of her chief city, the celebrated Tyre. This was predicted by Ezekiel,† who has left us a splendid description of the former commerce, the riches, and the power of this distinguished city.‡ This was one of Nebuchadnezzar's most difficult achievements. The Tyrians defended their walls for thirteen years before he could master the place; and because he persevered in the attack with such determined resolution, until every head of his army was bald, the Deity declared, by Ezekiel, that he should have Egypt for his reward.§

His conquests extended to the Phœnician colonies and also to Assyria; but the loss of the Babylonish writers prevents us from knowing much more of him than the Hebrew Scriptures exhibit. Strabo, from Megasthenes, briefly notices that his dominions extended to the Straits of Gibraltar.‖ Berosus described him as conquering Egypt, Syria, Phœnicia, and Arabia.¶ Abydenus mentions him as invading Libya and Iberia;** and the Arabian history of the world, considered by the Mussulmans as the most authentic of their historical writings, also mentions him and his successor, calling him Buktnusr, which seems to be an abbreviation of Buchad-nezzar, dropping the prefix Ne.†† He formed a new power on the earth, which the

subject, was delivered by Jeremiah, announcing the defeat of Pharaoh Necho's army at Carchemish, on the Euphrates, by the Babylonians.—Jeremiah, c. xl.

* Ib., c. xlix., v. 9–11. His father had concurred in the revolt which broke up the Assyrian empire, and by its fall laid the foundation of his son's greatness and the rise of the Median kingdom. The fall of Sardanapalus, the last Assyrian king, is well known to you.

† Ezekiel, c. xxvi., v. 7. ‡ Ib., c. xxvii.

§ "Son of man! Nebuchadrezzar, king of Babylon, caused his army to serve a great service against Tyrus.

"Every head was made bald, and every shoulder was peeled. Yet had he no wages for Tyrus for the service that he had served against it.

"Therefore, thus saith the Lord God. Behold! I will give the land of Egypt unto Nebuchadrezzar, and he shall take her multitude, and take her spoil, and take her prey; and it shall be wages for his armies."—Ib., c. xxix., v. 18, 19.

‖ Strabo Georg., l. 15.

¶ Joseph., contra Ap., l. i., c. 19; Euseb. Prep., l. ix., and Syncellus Chron., 220.

** Euseb. Prep., l. x., and Chron., p. 49.

†† This Arabic work is the Tareek i Tibree, written about 255 of the hegira, *or 868 of our era*, by Abu Jaffier ben Zureer, a Mohammedan of *Tubreez. It was shortly* afterward translated into Persian, with correc-

Deity declares to have been the special instrument of his prov idential agency.*

With his elevation and with his execution of the Divin purposes in the destruction of Jerusalem and the captivity c the Jewish nation, the sacred history of the ancient world ma be said to terminate, and its civil history to begin its mor general prominence and detail. No more supernatural inter positions took place in the world until the period of our Sa viour's human nativity. A new course of Divine agency, an therefore of sacred history, then began, which it is not the ob ject of my present correspondence with you to consider here, therefore, it properly ends. The peculiarly interestin book of Daniel, which has an intellectual grandeur about : both in subject and in style, which I cannot take up withou feeling, will show to you that the Persian kingdom, the Mace donian empire, and the Roman conquests and predominanc were all so many designs and appointments, and therefor productions of the Great Ruler of the world, and are so dis played to be in his predictions. Nor was his prophetic ey confined to these; it extended beyond them, into the farthe horizon of more distant time. He saw and portrayed the Ro man kingdom as breaking in pieces all other kingdoms, an as subduing all things. The succeeding part of the King c Babylon's visionary image he described to be that "a ston was cut out without hands, which smote the image upon hi feet, and brake them to pieces;" and then, while "the win carried them away, the stone became a great mountain, an filled the whole earth."†

tions and additions. This work represents Loharasp, who reigned i Balkh (Bactria), to have deputed Buktnuer to Irak with an army, giv ing him the command of Sham, Syria, Irak, Chaldea, Yunun, Arabi Felix; to their eastern and western frontiers, and also to the confines o Room or Europe. These ideas show the traditional account of the exter of his conquests, though mistaking the preceding facts. See an interes ing notice of this work in the British Magazine for March, 1835.

* "Thou art MY BATTLE-AXE and weapons of war. For with the will I break in pieces the nations, and with thee will I destroy king doms."—Jeremiah, c. li., v. 20. With the same force of metaphor Bal ylon is also called, from its sudden overpowering operations, "the ham mer of the whole earth."—Ib., c. l., v. 23. Isaiah seems to allude to it only great king in this verse, intimating his calamity and its benefit t the world: "He who smote the people in wrath with a continual stroke *he that ruled* the nations in anger, is persecuted, and none hindereth *The whole* earth is at rest and in quiet. They break forth into singing. —*Isaiah*, c. xiv., v. 6, 7.

† Daniel, c. ii., v. 34, 5.

This he interpreted to signify what would take place among the states and nations that were to follow the decline of imperial Rome.

"And in the days of these kings shall the God of Heaven set up A KINGDOM WHICH SHALL NEVER BE DESTROYED; and the kingdom shall not be left to other people, but it shall break in pieces and consume all these kingdoms, AND IT SHALL STAND FOR EVER."*

A subsequent vision was sent to Daniel in the reign of Nebuchadnezzar's son, in which the rise and succession of these three great Providential empires, the Persian, the Macedonian, and the Roman, were represented by three symbolical animals, expressing their different characters; and from the last a number of other kingdoms were exhibited as arising, typified by the horns which came out from it.† To these were appended that sublime description of the magnificent and awful period which is preparing and advancing, amid the sacred clouds that now involve the future destinies of our earth and of mankind, but which I will lay before you without comment, as no mortal knowledge or penetration can yet specifically illustrate the mysterious scenes and events which it implies, and which will hereafter be developed and realized to some generation of our late posterity.

"I beheld till the thrones were cast down, and THE ANCIENT OF DAYS did sit, whose garment was white as snow, and the hair of his head like the pure wool. His throne was like the fiery flame, and his wheels as burning fire.

"A fiery stream issued and came forth from before him. Thousand thousands ministered unto him, and ten thousand times ten thousand stood before him. The judgment was set and the books were opened.

"I saw in the night visions, and behold! One like the Son of Man came with the clouds of heaven, and came to the ANCIENT OF DAYS, and they brought him near before him. And there was given him dominion, and glory, and a kingdom, that ALL PEOPLE, nations, and languages SHOULD SERVE HIM. His dominion is an everlasting dominion which shall not pass away: and his kingdom that which shall not be destroyed."‡

I have now to bid you farewell as to this correspondence. I hope it will lead you to form right ideas on the Sacred His-

* Daniel, c. ii., v. 44.

† On this subject Bishop Newton's work on the prophecies, and Keith's late publication also upon them, taken from it, but much enlarged and enriched with very valuable additions of his own, deserve your attentive reading.

‡ *Daniel, c. vii., v. 9, 10 13, 14.*

tory of the World, on which I have endeavoured to sketch the outlines of its leading subjects. I mentioned some other topics in the preface to my second volume among those which it would be desirable to review; but, on reconsidering them, I find that they principally concern the civil history of the world, and, therefore, are not within the compass of the present work.

I should like to take a survey of ancient history, between the periods of the establishment of the Babylonian empire and our Saviour's nativity, which would embrace what I here omit, upon the views and principles of the present work, for my own larger information and improvement: and as these subjects are peculiarly interesting to me, I shall, for my own sake, study it. But whether anything may arise from this application that may seem to me to be worth laying before you or others, I cannot now foresee.

Approaching the age of seventy, it would be absurd in me to give any promise or pledge about what must be uncertain from mere natural causes. But if I feel unable to suggest anything useful to you upon it, I would recommend you to make it one of the studies of your maturer life, as it will well reward you for the improvement which such sacred contemplations always produce. The WAYS of GOD will always constitute as noble a subject of science as his splendid works: and the more intellectual human nature becomes, the more they will be investigated and understood. It is his assurance that the true knowledge of HIM shall become, at some future period, universal in the earth.*

* "For the earth shall be filled with the knowledge of the glory of the Lord, as the waters cover the sea."—Habakkuk, c. ii., v. 14.

THE END.

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